Gold Subscribers Guide
Auto Attendant
Call Recording
Call Queuing

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1.4	Support Call Queuing	Simon Gregory	February 2014
1.5	Addendum to Call Queuing	Simon Gregory	May 2014

Contents

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1. Introduction to Gold Subscribers Guide

1.1. Purpose of this document

This guide covers the operation of the two additional modules that are included for any phone that has purchased a Gold subscription – Auto Attendant, Call Recording and Call Queuing.

1.2. Related applications and documents

The System Administrators Guide defines how to set up the phone system for a Company account and all of its users. This can be downloaded from the portal website via the Support -> Downloads menu.

The Setup and User Guide provides guidance for the ordinary user on the facilities and features of the phone system. It should be used in conjunction with this manual. This can be downloaded from the same Support menu on the portal website.

1.3. Document Conventions

The associated portal website is made up of a number of pages accessed by means of menus and sub-menus and tabs. Each page may then be divided into panels or boxes of information. This manual will use the convention of separating each level with a hyphen (–) and use italics for tabs or panel headings, so for example, finding the place to set up a PIN for accessing your voice mail remotely is designated **Account – Security – *Change Service Pin***.

There are a couple of features that occur on every page of the portal web site:

- To obtain further information about any particular feature on a page, hover over the adjacent help icon .

- Every data entry page finishes with a button. Please remember to use this whenever data is entered or amended or your changes will not be applied.

Clicking on the **Help** text at the top right of the screen next to your user name will open up a new web page where you should select the appropriate help link. It is organised by chapter heading or alternatively you can search alphabetically for a topic using the Index function.

2. AUTO ATTENDANT

This section is designed to help you get the most out of your Auto Attendant feature, which is part of your Gold Subscription.

The Auto Attendant (AA) functionality can be used "in front" of existing settings and features such as Call Queuing, Call Forwarding etc. So for example, it is possible to configure the AA to play an announcement and then execute an existing hunt group defined for a particular number.

The AA contains a "state of the art" text to speech module that allows announcements to be computer generated as an alternative to being recorded. This feature can be used while developing new AA menus, and also in the final operational menus. The AA "voice" is Scottish and female, which is similar to other announcements in your system

AA menus and announcements are defined at the company account level by the Company Administrator, which means that they can be defined once and then used for multiple numbers.

2.1. Using Auto Attendant

There are 5 steps to creating the Auto Attendant.

Select; Company – Features – Auto Attendant
- Record AA announcements to be uploaded as audio files or recorded via one of your company phones.
- Define the different menus that you will need in your company
- Run a wizard which quickly creates skeletal AA menus
- Use the menu editor to enter the required functionality into the newly created menus or to amend any existing ones
- Associate particular phones with appropriate AA menus

3. Auto Attendant Recordings

3.1. Recordings panel

Select; Company Settings - Auto Attendant - Recordings menu

This panel allows you to create a library of announcements either by uploading audio files or by recording them from your phone. These will be used within the AA menus described in Section 3.

Adding recordings

Click the ✚ icon to add a new announcement recording. This will be followed by the following data entry form:

Enter a name for your recording and a brief description for future reference.

This will create a recording entry with a status of '**Not Provided"'.** The next step is to upload or record the actual announcement.

Uploading recordings

An existing recording may be uploaded. The file to be uploaded must be a PCM encoded WAV file which has been recorded at a sample rate of 8KHz, with a sample size of 16bit and in mono - for a bit rate of 128kbps. There are several programs available that can convert files to this common format. To help confirm the file has been correctly recorded, right-click on the WAV file in Windows, and

(depending on version) and choose 'Properties', and then the 'Details' tab. The bit rate should be shown:

NOTE: Files not in the correct format will be rejected by the portal.

Click the ☐ icon to upload an existing recording. It is important that this recording is in the correct format.

Two buttons are now displayed. Click the 'Add file' button ☐ and you are presented with a standard file selection window. Select your audio file and close the window.

Name	Status	Recorded	Duration	Source	Actions
Welcome to Acropolis Engineering	Valid	13 Jan 17:19	00:04	Recorded	✏ ✕ ⊛ ▢◿ ▢
Welcome to Sales Department	Validating	16 Jan 11:00		msg.wav	✏ ✕
Welcome to Service Department	Not provided				✏ ✕ ⊛ ▢◿

⊕ ↻   Page 1 of 1 **1**

Upload Voice Recording for Welcome to Service Department
Please select a .wav file by clicking on the 'Add File' icon below. When you have chosen the correct file, press the 'Upload File' icon below to begin the upload.

▢ Add File

▢◿ Upload File

If you have selected the wrong file you can choose a different file by clicking ✕ or continue on to upload the file by selecting ▢◿.

Upload Voice Recording for Welcome to Accounts Department
Please select a .wav file by clicking on the 'Add File' icon below. When you have chosen the correct file, press the 'Upload File' icon below to begin the upload.

✕ _Accounts intro.wav

▢◿ Upload File

Following an uploading progress window you will see the status change to "Validating"

It can now take up to 5 minutes to validate and distribute the file around the system.

You can check the status by clicking the refresh button ↻. Once the file has been successfully processed the status will change to "Valid"

If the status changes to "Invalid" there was a problem with the recording, which must be corrected before the file is uploaded again. This is almost always a format problem so check that it is in the correct format as detailed above.

Name	Status	Recorded	Duration	Source	Actions
Welcome to Acropolis Engineering	Valid	13 Jan 17:19	00:04	Recorded	✏ ✕ ⊛ ▢◿ ▢
Welcome to Sales Department	Validating	16 Jan 11:00		msg.wav	✏ ✕
Welcome to Service Department	Not provided				✏ ✕ ⊛ ▢◿

⊕ ↻   Page 1 of 1 **1**

Recording announcements via a company Phone

Click the ⊛ icon to record via your default phone. You will be presented with the normal "click to dial" confirmation window.

Click [OK] and your default phone will ring. When answered, you will be asked to press any key (on the phone) to continue. At this point you must wait for the beep before starting and terminate the recording by pressing #.

After completing your recording you will be presented with 3 options

- Press 1 to accept the recording
- Press 2 to listen to the recording
- Press 3 to re-record the recording

You must accept the recording before hanging up or you recording will be lost.

Once recorded the panel shows the status as Valid and the Source as "Recorded"

Name	Status	Recorded	Duration	Source	Actions
Welcome to Acropolis Engineering	Valid	13 Jan 17:19	00:04	Recorded	✏ ✕ ⊗ ▱▱ ▱
⊕ ⟳					Page 1 of 1 1

The other **Action** icons available are:

Download recording

Click the ▱ icon to download an existing recording. You will be presented with the standard file download panel in your browser.

Edit recording name

Click the ✏ icon to change the recording name.

Delete recordings

Click the ✕ icon to delete an existing recording. You will be presented a standard message box to confirm the deletion.

4. Auto Attendant Menus

4.1. Menus panel

Select; Company Settings - Auto Attendant - Menus

This panel shows your AA menus, and their status. New menus are created as *disabled*. Once they have been edited to add content you can make them *active* by clicking on the ✏ icon and changing their status so that they can then be allocated to particular phones for use via the **Auto Attendant Phones** menu.

These menus are 'company wide' and can be used by as many account numbers that have purchased AA functionality. From here you can:

Create a new menu

Click the ✚ icon to add a new menu. See an explanation of this menu wizard later in the section:

Edit menu details

Click the ✏ icon to change the menu name or change its status between *disabled* and *active*.

Delete menu

Click the ✖ icon to delete an existing menu. You will be shown a standard message box to confirm the deletion.

Manage menu

Click the ⚙ icon to edit the contents of an existing menu. See an explanation of the menu editor later in the section.

Copy menu

Click the 🗐 icon to copy a menu. This creates a (copy) menu whose name you can change by editing menu details ✏.

4.2. Menu Types

There are 2 types of Auto Attendant scenarios that can be defined.

Pre-Announcement

This is a simple announcement played to the caller before passing the call to the called number. All the calling features of your system are honoured as the call is passed from the AA, so this functionality can be used in front of hunt groups, diverts etc.

Caller Menu

This is the traditional AA usage, an announcement and menu is played before the caller is prompted to "press 1 for sales" etc.

On standard phones the following keys are available for use:
- The digits 0-9
- The hash key #
- The star key *

Various options are available to be assigned to the phone keys:

- Transfer the caller to any number. This could be a company number, a UK landline, mobile or international number.
- Leave a voice mail. This can be the voice mail for the called number, or the voice mail of a specific number.
- Start a sub menu – this allows you to build complex menus.
- Exit the call (hang up).
- Return from a submenu to a main menu.
- Play a recording

There are two possible errors a user can make:

- Not pressing any key
- Pressing a key which does not have an assigned action (Invalid option)

It is possible to override the erroneous action in these cases and redirect the caller to correct their action.

4.3. Menu Wizard

The wizard used to create a new menu is accessed via the ✚ icon on the Auto Attendant Menus panel.

Name	Status	Actions
Acropolis main	Active	✏ ✕ ⚙ ▣
Acropolis sub	Disabled	✏ ✕ ⚙ ▣
✚		Page 1 of 1 1

Set Up New Auto Attendant Menu

The wizard will guide you through the creation of a new Auto Attendant Menu by providing some basic information about its setup. This will include:

* A unique name for the Menu
* The type of Menu (Caller Menu or Pre-Announcement)
* The kind of Voice Prompts required (recorded or computer-generated)
* Additional setup options depending on the Menu type chosen above

Once complete, the basic Menu template will be created, and and you will then be able to fill out the Menu detail by choosing it from the grid and selecting the 'Manage this Auto Attendant Menu'.

The front page is an introductory page, clicking on ⇨ takes you to:

Menu Name and Type
Provide some basic details about the type of Menu.

Menu Name: _____

Menu Type: [Pre-Announcement ⬍]

Page 1 of 3   ⬅ ⇨

On this page you can give your menu a name and select the type required, either *Pre-Announcement* or *Caller Menu* described above.

Pre-Announcement

In this mode you next select if you want to use announcements that you have *recorded* or ones that will be computer *generated* from text you will enter.

Menu Options
Supply additional setup options for the Menu.

Options

Voice Prompts: [Recorded ⬍]

Page 2 of 3   ⬅ ⇨

Clicking ⇨ will take you to a summary page, which allows you to review your choices.

Setup Summary
View a summary of the details

Menu Name and Type	
Name	Acropolis Sub 1
Type	Pre-Announcement
Menu Options	
Voice Prompts	Generated

Page 3 of 3

Clicking ❊ will create the AA menu and display the menu editor so that you can specify the required functionality for the newly created menu.

Name	Status	Actions
Acropolis main	Active	✏ ✕ ⚙ ⬚
Acropolis sub	Disabled	✏ ✕ ⚙ ⬚
Acropolis Sub 1	Disabled	✏ ✕ ⚙ ⬚
✚		Page 1 of 1 **1**

Manage Auto Attendant Menu for Acropolis Sub 1

Label	Key	Action	Setting
Start	N/a ⇕	Playback TTS ⇕	
	N/a ⇕	Transfer call to CLI ⇕	[ ] Use [CLI]

The status of the menu is 'disabled' as while the structure of the menu has been created, we have yet to enter any details.

Using the editor to complete the menu will be covered in section 3.4.

Caller Menu

Selecting 'Caller Menu' from page 2 of the wizard presents you with:

Menu Options
Supply additional setup options for the Menu.

Options	
Voice Prompts:	Recorded ⇕
Transfer Pre-announcements:	Off ⇕
Exception Handling:	Default ⇕
Menu Settings:	Default ⇕

Page 2 of 3

In this mode you first select if you want to use announcements that you have *recorded* or ones that will be computer *generated* from text you will enter.

You also have the following options:

- Transfer Pre-announcements – selecting 'on' allows you to play a message after the caller has selected an option, but before it is actioned.
- Exception Handling – selecting 'Explicit' will add items in the menu to create messages for invalid option selection and user timeouts (i.e. no key press detected)
- Menu Settings – selecting 'Explicit' will add items in the menu to allow you change the timeouts and number of retries

Clicking ⇨ will take you to a summary page, which allows you to review your choices.

Clicking ☀ will create the AA menu and display the menu editor so that you can specify the required functionality for the newly created menu.

4.4. Menu Editor

The editor is displayed after the menu creation wizard has completed, or at any time by clicking on the ⚙ icon on the Auto Attendant Menus panel

Manage Auto Attendant Menu for Acropolis Sub 2

Label	Key	Action	Setting
Start	N/a ⬍	Playback TTS ⬍	Welcome to Acropolis Engineering. Your calls may be recorded for training purposes.
	N/a ⬍	Set error repeat count ⬍	3
	N/a ⬍	Set the wait for input timeout ⬍	5
Restart	N/a ⬍	Playback TTS / wait for input ⬍	Please choose from the following options. Press 1 for accounts. Press 2 for sales. Press 3 for support.
	1 ⬍	Transfer call to CLI ⬍	0123009654 Use [CLI] 🗨
	2 ⬍	Transfer call to CLI ⬍	0123009655 Use [CLI] 🗨
	3 ⬍	Goto Voicemail ⬍	[CLI] Use [CLI] 🗨
	4 ⬍	Repeat attempt to get input ⬍	
	5 ⬍	Repeat attempt to get input ⬍	
	6 ⬍	Repeat attempt to get input ⬍	
	7 ⬍	Repeat attempt to get input ⬍	
	8 ⬍	Repeat attempt to get input ⬍	
	9 ⬍	Repeat attempt to get input ⬍	
	0 ⬍	Repeat attempt to get input ⬍	
	* ⬍	Goto (uncond) ⬍	Restart ⬍
	# ⬍	Exit ⬍	
Invalid	N/a ⬍	Playback TTS ⬍	Please try again
	N/a ⬍	Goto (uncond) ⬍	Restart ⬍
Timeout	N/a ⬍	Playback TTS ⬍	Please try again
	N/a ⬍	Goto (uncond) ⬍	Restart ⬍
Error	N/a ⬍	Playback TTS ⬍	Please try again
	N/a ⬍	Up to Parent Menu ⬍	

Text to speech (TTS)

The text to speech generator operates on the words entered in the text boxes under the *Setting* column.

There is a 5 minute delay after the menu is saved while the text is converted and the generated speech is distributed around the system.

CLI Number

As the same AA menu can be used by several company telephones therefore an easy mechanism is required to refer to the called number in a menu. This is achieved by selecting the 'Use CLI' button. This is interpreted as the called number at the time the AA menu is run.

Editor panel

The editor uses 4 columns. These are:

Label

These are predefined places were the menu starts or continues from when some condition is met. Predefined labels are:

- Start – the first action executed after the menu starts.
- Restart – the action to be executed if the current menu is retrying to get a valid caller selection.
- If explicit error handling has been selected the following labels are also used:
    - Timeout - this is the action executed when a lack of user input causes a timeout
    - Invalid - This action is executed when a use enters a key that has not been defined.
    - Error - This action is executed when the maximum number of errors (invalid selection or timeout) has been exceeded.

Key

This is where actions are associated with individual phone keys. These key values are associated with a "Wait for input" action.

Action

These actions provide the main functionality within the menu. They are:

- Playback recording – This will play back (in full) an announcement which has been uploaded or recorded via a company phone.
- Playback recording / wait for input – This will play back an announcement which has been uploaded or recorded. The announcement may be interrupted by the user pressing a key on the telephone. The action will wait for a maximum of the timeout period as defined in 'Set the wait for input'. When an input (phone key press) is received it will jump to the next appropriate action.
- Playback TTS – This will play back (in full) a computer generated announcement that is entered in the *Setting* column.
- Playback TTS / wait for input - This will play back a computer generated announcement that is entered in the *Setting* column. The announcement may be interrupted by the user pressing a key on the telephone. The action will wait for a maximum of the timeout period. When an input (phone key press) is received it will jump to the next appropriate action.
- Call Sub Menu – This will pass control to another existing active menu. In this way it is possible to create nested menus, offering further choices after an initial option has been selected by the caller.

- Repeat attempt to get input – This action will pass control back to the Restart label. This is primarily used for recovering from errors.
- Transfer call to CLI – This will pass the call to the entered number, which can be any sort of destination. The owner of the subscription that is running the AA will be responsible for the cost of this outbound leg of the call.
- Set wait for input timeout – This allows you to specify the maximum time in seconds the menu will wait for an input before an error is triggered. The default is 5 seconds.
- Set error repeat count – This allows you to specify the maximum number of retries when the caller enters an incorrect input. The default is 2 retries.
- Goto (uncond) – This will cause the menu to continue from the label specified.
- Goto Voice mail – This will transfer the call to the specified voice mail.
- Do nothing – This allows an action in the menu to be ignored. It is most useful during the development and testing of new more complex menus.
- Exit – This will terminate the AA menu, the call is dropped.

Setting

This is where the data for the specific actions is entered. The nature of the data will depend on the specific action; the editor will guide you where possible, where relevant just hover over the ⬜ icon.

Activating your menu

New menus are created as *disabled*. Once they have been edited to add content you can make them *active* by clicking on the ✏ icon and changing their status to publish them for use.

An *active* AA menu is attached to a particular telephone via the **Company – Features – Auto Attendant – Phones** menu, see Section 4.

Editing 'Pre Announcement' using recorded announcements

This is where the data for the specific actions is entered. The nature of the data will depend on the specific action; the editor will guide you where possible.

Manage Auto Attendant Menu for Acropolis Sub 1

Label	Key	Action	Setting	
Start	N/a ⬍	Playback Recording ⬍	Welcome to Acropolis Engineering ⬍	
	N/a ⬍	Transfer call to CLI ⬍	[CLI] Use [CLI]	⬜

In this case select the recording from the pop up list in the *Setting* column of the *Playback Recording* action and the number to pass the call to in the *Setting* column of the *Transfer call to CLI* action.

Editing 'Pre Announcement' using generated announcements

This this case it is just necessary to enter the required announcement as text in the *Setting* column of the *Playback TTS* action and the number to pass the call to in the *Setting* column of the *Transfer call to CLI* action.

Manage Auto Attendant Menu for Acropolis Sub 0

Label	Key	Action	Setting
Start	N/a ⬍	Playback TTS ⬍	Welcome to Acropolis Engineering Your calls may be recorded for training purposes
	N/a ⬍	Transfer call to CLI ⬍	[CLI] Use [CLI] 🗩

Editing 'Caller Menu' using recorded announcements

This this case it is necessary to:

- Select the recording for the initial announcement from the pop up list in the *Setting* column of the *Playback Recording* action
- Select the recording for the subsequent announcement in the *Setting* column of the *Playback Recording / wait for input* action.
- Select 'Transfer call to CLI' for each key you are providing an action for. For each of these enter the telephone number to transfer to in the *Settings* column.

  As the same AA menu can be used by several company telephones therefore an easy mechanism is required to refer to the called number in a menu. This is achieved by selecting the 'Use CLI' button. This is interpreted as the called number at the time the AA menu is run.

Manage Auto Attendant Menu for Acropolis Sub 3

Label	Key	Action	Setting
Start	N/a ⬍	Playback Recording ⬍	Welcome to Acropolis Engineering ⬍
Restart	N/a ⬍	Playback Recording / wait for input ⬍	Options Menu ⬍
	1 ⬍	Transfer call to CLI ⬍	0123009654 Use [CLI] 🗩
	2 ⬍	Transfer call to CLI ⬍	0123009655 Use [CLI] 🗩
	3 ⬍	Goto Voicemail ⬍	[CLI] Use [CLI] 🗩
	4 ⬍	Repeat attempt to get input ⬍	
	5 ⬍	Repeat attempt to get input ⬍	
	6 ⬍	Repeat attempt to get input ⬍	
	7 ⬍	Repeat attempt to get input ⬍	
	8 ⬍	Repeat attempt to get input ⬍	
	9 ⬍	Repeat attempt to get input ⬍	
	0 ⬍	Repeat attempt to get input ⬍	
	* ⬍	Goto (uncond) ⬍	Restart ⬍
	# ⬍	Exit ⬍	

Editing 'Caller Menu' using generated announcements

This this case it is necessary to:

- Enter the text for the initial announcement in the *Setting* column of the *Playback Recording* action
- Enter the text for the subsequent announcement in the *Setting* column of the *Playback Recording / wait for input* action.
- Select 'Transfer call to CLI' for each key you are providing an action for. For each of these enter the telephone number to transfer to in the *Setting* field.

  As the same AA menu can be used by several company telephones therefore an easy mechanism is required to refer to the called number in a menu. This is achieved by selecting the 'Use CLI' button. This is interpreted as the called number at the time the AA menu is run.

Manage Auto Attendant Menu for Acropolis main

Label	Key	Action	Setting	
Start	N/a	Playback TTS	Welcome to Acropolis Engineering. Calls may be recorded for training purposes	
Restart	N/a	Playback TTS / wait for input	Please select from the following options. Press 1 for Accounts, press 2 for sales, press 3 for support	
	1	Transfer call to CLI	01442500849	Use [CLI]
	2	Transfer call to CLI	01442500849	Use [CLI]
	3	Goto Voicemail	01442500848	Use [CLI]
	4	Repeat attempt to get input		
	5	Repeat attempt to get input		
	6	Repeat attempt to get input		
	7	Repeat attempt to get input		
	8	Repeat attempt to get input		
	9	Repeat attempt to get input		
	0	Repeat attempt to get input		
	*	Goto (uncond)	Restart	
	#	Exit		

Editing 'Caller Menu' with pre-announcements enabled

In this case there are two actions created for every key the user can press:

- Select the required recording for each announcement from the pop up list in the *Setting* Column of the *Playback Recording* action
- Enter the called number for the 'Transfer to CLI' action as before.

For the remaining unused lines in the *Key* column, change the *Playback Recording* option to 'Do nothing', otherwise the editor will generate an error and when you attempt to save the menu it will not be saved.

Manage Auto Attendant Menu for Acropolis Sub 4

Label	Key	Action	Setting
Start	N/a ⇕	Playback Recording ⇕	Welcome to Acropolis Engineering ⇕
Restart	N/a ⇕	Playback Recording / wait for input ⇕	Options Menu ⇕
	1 ⇕	Playback Recording ⇕	Transfer to Accounts ⇕
	N/a ⇕	Transfer call to CLI ⇕	0123009654 · Use [CLI] 💬
	2 ⇕	Playback Recording ⇕	Transfer to Sales ⇕
	N/a ⇕	Transfer call to CLI ⇕	0123009655 · Use [CLI] 💬
	3 ⇕	Playback Recording ⇕	Transfer to Support ⇕
	N/a ⇕	Goto Voicemail ⇕	[CLI] · Use [CLI] 💬
	4 ⇕	Do nothing ⇕	
	N/a ⇕	Repeat attempt to get input ⇕	
	5 ⇕	Do nothing ⇕	
	N/a ⇕	Repeat attempt to get input ⇕	

Editing 'Caller Menu' with Explicit Menu Settings

In this case there are two actions created:

- Set error repeat count
- Set the wait for input timeout

Change the values in the *Setting* column as required

Manage Auto Attendant Menu for Acropolis Sub 2

Label	Key	Action	Setting
Start	N/a ⇕	Playback TTS ⇕	Welcome to Acropolis Engineering. Your calls may be recorded for training purposes.
	N/a ⇕	Set error repeat count ⇕	3
	N/a ⇕	Set the wait for input timeout ⇕	5
Restart	N/a ⇕	Playback TTS / wait for input ⇕	Please choose from the following options. Press 1 for accounts. Press 2 for sales. Press 3 for support.

Editing 'Caller Menu' with Explicit Exception Handling

In this case there are 6 additional actions created:

- A label 'Invalid' with a playback recording action followed by a 'go to' restart action.
  This action will execute when a phone key is pressed and there is not an action defined for that key. This will occur until the repeat count is exceeded.
- A label 'Timeout' with a playback recording action followed by a 'go to' restart action.
  This action will execute if no phone key press is detected within the timeout period (seconds). This will occur until the repeat count is exceeded.
- A label 'Error' with a playback recording action followed by an exit action.
  This action will execute when the error count is exceeded for this menu.

Invalid	N/a ⬍	Playback TTS ⬍	Please try again
	N/a ⬍	Goto (uncond) ⬍	Restart ⬍
Timeout	N/a ⬍	Playback TTS ⬍	Please try again
	N/a ⬍	Goto (uncond) ⬍	Restart ⬍
Error	N/a ⬍	Playback TTS ⬍	Please try again
	N/a ⬍	Exit ⬍	

5.   Auto Attendant Phones

5.1. Phones panel

Select; Company - Features - Auto Attendant - Phones

Applying Auto Attendant to a phone

New menus are created as *disabled*. Once they have been edited to add content you can make them *active* by clicking on the 🖊 icon and changing their status to publish them for use.

An active AA menu is attached to a particular telephone via the **Company – Features – Auto Attendant – Phones** menu.

Select a phone that has the Auto Attendant product enabled. Select which announcement menu you want to apply to this number. Finally, you can control whether the menu is played when internal calls are received as well as for external calls. When ready, click 🟧SAVE to switch the Auto Attendant on for this phone.

Auto Attendant Menu
You can associate a previously created Auto Attendant Menu with one of your phones.
These menus are defined using the 'Auto Attendant Menus' panel.

First, select a phone from the list of those you own.

💬 Phone number: `01288272864 ▾`

You can choose which Auto Attendant Menu that callers calling this phone number will hear. To switch the feature off select 'Off.'

💬 Auto Attendant Menu: `menu_full           ▾`
💬 Call types supported: `External only    ▾`

🟧SAVE

Auto Attendant with Time-Based Routing

If Time-based Routing (TBR) is turned on for your phone then you will see an additional menu item:

for period: `Any other time            ⇕` 💬📋

Here you can set up alternative strategies for different Business Hours, as set up by the System Administrator. The pop up menu attached to *'for period:'* lists the complete business hours schedule, and different Auto Attendant menus can be applied to each time period. In this way alternative forwarding arrangements can be applied, for example, at weekends or evenings.

Full details of Time-based Routing are given in the System Administrators Guide.

To quickly move to the Call Management Planner where you can see a summary of all the time period configurations applied to this phone click 📋.

Checking Auto Attendant status of a phone

The status of the Phone can be confirmed from **Home – *Quick view of my phones*.** The Highest Ranked Feature column will show Auto Attendant is switched on for that phone.

6.   CALL RECORDING

This section is designed to help you get the most out of your Call Recording feature, which is part of your Gold Subscription.

Call Recording allows the Administrator to set up and monitor the recording of external and/or internal calls on all or specific Company account phones that have a 'Gold' subscription.

For each phone number you may choose to record all calls or a specified percentage of calls whether external or internal. A search facility allows the Administrator to retrieve any calls that need to be reviewed or downloaded.

Recordings are stored as MP3 format files and may be archived for local on-site storage. Each file that is downloaded can be verified to ensure that it hasn't been changed in any way. Local archiving, verifying and deleting recordings require the use of the **Phone Buddy** application which can be downloaded via the Support – Downloads menu on the portal website. **Phone Buddy** will only operate on Microsoft Windows based systems (XP SP3 onwards).

6.1. Legal Requirements

There are strict legal requirements governing the recording of calls of both customers and employees. These requirements cover:

- When you can record a customer or employee
- The purpose of any recording
- What notification you must give to callers and when during a call
- The treatment of sensitive information such as credit card details
- How long you can keep recordings

Ofcom and the DTI detail the legislation covering call recording and various industry bodies provide advice, most of which can be found online. The main acts of legislation are:

- Regulation of Investigatory Powers Act 2000 ("RIPA")
- Telecommunications (Lawful Business Practice)(Interception of Communications) Regulations 2000 ("LBP Regulations")
- Data Protection Act 1998
- Telecommunications (Data Protection and Privacy) Regulations 1999
- Human Rights Act 1998.

It is recommended that you seek legal advice on your particular circumstances to ensure that you are abiding by all the relevant laws and rules governing call recording. It is your responsibility to be compliant with all legal requirements.

6.2. Using Call Recording

The following steps and processes should be followed in setting up and managing Call recording:

1. Select which phone numbers you want to record calls from. This is done via either the **Company – Maintenance - User Maintenance** menu where you want to set up using a persons name or via the **Company – Maintenance – Phone Maintenance** menu if you want to do it via phone numbers

2. For each phone decide whether you want to record just external calls or both internal and external calls

3. Set the percentage of incoming and outgoing calls you want to record separately

4. Monitor recorded calls and export reports of calls recorded

5. Delete unwanted call recordings, however a record of the call having been recorded is always kept

6. Archive recorded calls from online storage to your own local servers

7. Verify that archived recorded calls have not been altered or corrupted.

7. Controlling Call Recording

Only phones numbers with a 'Gold' Subscription may record calls. The procedure to enable call recording is carried out only by the Company Administrator. An ordinary phone user can check if his phone is set up to record calls and see which calls were recorded, but they cannot change any of the settings.

Call recording may be set up by user name via User Maintenance or by phone number via Phone Maintenance.

7.1. Enabling Call Recording via User Maintenance

Select; Company – Maintenance – User Maintenance

First use the search facility by any convenient method to choose the user you wish to apply call recording to.

Once the particular user has been found, click on the 🔧 icon to bring up their phone details. If they have a 'Gold' Subscription phone then in the *Actions* column there will either be an ⭕ icon indicating that they are eligible for call recording but don't have it switched on, or an ✴ icon indicating that call recording is already switched on. Alternatively you can hover over the *Other features* icon ⚙ to see whether 'Record Calls' is in the list. If there is an (A/c) following the 'Record Calls' entry it means both internal and external calls will be recorded.

To enable call recording, click on the ⭕ icon under the Actions column. This allows you to configure the way in which recording of calls works for a given phone number when making and receiving calls.

Turn on the Call recording feature by clicking on the appropriate tick box.

Next select whether you want to record only external calls, or both external and internal calls from the pull down list.

Finally select what proportion of calls received and calls made you would like to record from 10% to 100%. The actual calls selected for recording will be chosen randomly.

Click to register the changes.

7.2. Enabling Call Recording via Phone Maintenance

Select; Company – Maintenance – Phone Maintenance

First use the search facility by any convenient method to choose the phone you wish to apply call recording to.

If the phone has a 'Gold' Subscription then in the *Actions* column there will either be an ⭘ icon indicating that they are eligible for call recording but don't have it switched on, or an ⚙ icon indicating that call recording is switched on. Alternatively you can click on the *Other features* icon ⚙ to see whether 'Record Calls' is in the list. If there is an (A/c) following the 'Record Calls' entry it means both internal and external calls will be recorded.

To set up call recording, click on the ⭕ icon under the Actions column. This allows you to configure the way in which recording of calls works for a given phone number when making and receiving calls as detailed above for *User maintenance.*

7.3. Disabling or Updating Call Recording

Call recording can be switched off by following the enabling process set out in 2.1 and 2.2 above but deselecting the call recording by clicking on the tick box once more. The tick should disappear to show that call recording has been disabled.

Similarly changes to *Call type supported* and *proportion of received and made calls recorded* can be carried out at any time.

7.4. Controlling Call Recording while in a call

Once in a call that is being recorded, each phone user has the ability to temporarily pause the recording. The use of this facility may well be a requirement when seeking to avoid the recording of sensitive information such as credit card numbers, security codes etc.

To pause recording mid-call press *78. The recording will pause for 30 seconds by default before recording of the call resumes.

To resume recording before the automatic 30 second reinstatement, dial *79.

7.5. Checking on Call Recordings

The Administrator can check on the call recording status of a particular user as described above in 2.1 and 2.2

Phones Summary Check

An ordinary user can check if any of his calls are to be recorded by selecting; Account - Summary – *Phones Summary* and hover over the *Other* icon ⚙ in the *Features Enabled* column. If call recording is enabled it will be present in the feature list. If there is an (A/c) following the 'Record Calls' entry it means both internal and external calls will be recorded.

Calls History Check

A user can see which calls made or received have been recorded by selecting; Calls History – *Calls received, Calls made* or *Calls search.*

The table will show an additional call recorded icon ✴ in the *Detail* column.

Calls History

Calls received | Calls made | **Calls search**

Type of Calls: [All ⌄]

From: [Nov ⌄] [24 ⌄] [2011] 📅 [00 00]   To: [Nov ⌄] [24 ⌄] [2011] 📅 [23 00]   🔍

Date	Time	From	To	Location / Additional details	Duration	Detail
24 Nov	15:59:13	0123009654	0752583618 📇❓	Mobile T-Mobile Everything Everywhere	06:27	⭐◎
24 Nov	14:51:18	Gerald Lynwood	0123009654	Hemel Hempstead, Hertfordshire	00:25	⭐▢
24 Nov	11:35:43	Stanley Porterfield	0123009654		00:03	⭐◎
24 Nov	11:34:37	Gerald Lynwood	0123009654		00:00	⭐
24 Nov	11:29:18	0123009654	Stanley Porterfield		00:00	⭐
24 Nov	11:27:40	0123009654	Gerald Lynwood		00:12	⭐

dxP   Page 1 of 1 | 1 |

8. Reviewing Call Recordings

The Administrator can check on all calls recorded on the Company account. A search facility allows you to find just the calls you want and you can download and listen to them or delete them. There is also a facility for exporting recorded call reports. There is a charge associated with storing Call recordings online so a table listing current storage values is provided.

8.1. Recorded Calls

Select; Company – Recorded Calls History – *Recorded Calls*

Search Criteria

Location allows you to choose all call recordings, those still stored online and those deleted. The archived option is not yet implemented.

From & To allows you to specify a date and time range. Use the 📅 icon to conveniently select a date. The chosen date range cannot be more than one month.

Calling and Called phones. You may list all calls received and made or only those from specific phone numbers that you enter here.

Click the search icon 🔍 and the resulting list gives you details of when they calls were recorded, who the calls were between and the duration of the call.

Status

Indicates whether a call recording is stored online ⊛ or deleted ⊛. While deleted call recordings cannot be retrieved from the online server, a record is kept of all calls that were recorded whatever their status. The system automatically deletes calls after six months, but always retains a record of the recording having been made.

Actions

Online Call recordings may be downloaded and listened to by clicking on the 📁 icon, which will bring up a *play* or *save* form on your PC. Either way your default media player will be invoked if you wish to play the recording back.

Call recordings can be deleted individually by clicking on the file deletion icon ✷. This removes them from online storage. You may download an individual Call recording for local storage before deleting, as described above, but it is recommended, particularly if you are deleting more than one call recording, to use the *Delete recordings* option in the **Phone Buddy** application, described later.

Export Call Records

Call Recording reports can be exported either as a CSV file 📁C, suitable for viewing in Excel, as an XML file 📁X or as a PDF file 📁P. The PDF export option produces a more concise report.

The PDF report shows:
- Date and time of recording
- Phone numbers of the parties taking part in the call together with their name, if available from the Address books
- Call duration
- Call status, whether deleted or online.

The CSV and XML reports show in addition:
- Date and time a call recording was deleted
- The person who deleted it.
- Size of the recorded audio MP3 file
- File checksum, which is used in the verification process, discussed later.

8.2. Recorded Calls History

Select; Company – Recorded Calls History – *Recorded Calls History*

There is a monthly charge made for online storage that is based on the maximum reached at any time in the month. This table shows the starting storage position for any month (Min Online Size) and the maximum reached (Max Online Size).

Individual Call recordings can be deleted from online storage via the *Recorded Calls* tab, but Administrators can delete Call recordings in bulk via Phone Buddy as described later. This will reduce online storage accordingly. Even though the recording can no longer be retrieved a history of all Call recordings made is kept indefinitely as an auditable record.

Call recordings can be archived locally and verified as correct backups via the *Download recordings* option in the **Phone Buddy** application, described later.

Call recording storage reports can be exported as a CSV file, suitable for viewing in Excel, as an XML file or as a PDF file.

Call recordings are stored securely online for 6 months unless deleted earlier by the Administrator. After this period Call recordings are automatically deleted, but auditable records are kept online indefinitely.

9. Storing Call Recordings

The Administrator may want to archive and manage call recordings locally rather than online. To that end the Administrators version of the **Phone Buddy** application provides the tools to download call recordings, verify that the downloaded calls have not been altered, and delete call recordings, all in bulk.

9.1. Setting up Phone Buddy

The instructions for installing **Phone Buddy** are given in the *Setup and User Manual*. However, when you logon as Administrator, you get access to other menu options not available to the ordinary user, specifically *Recorded Calls* and *Settings – Recorded Calls*.
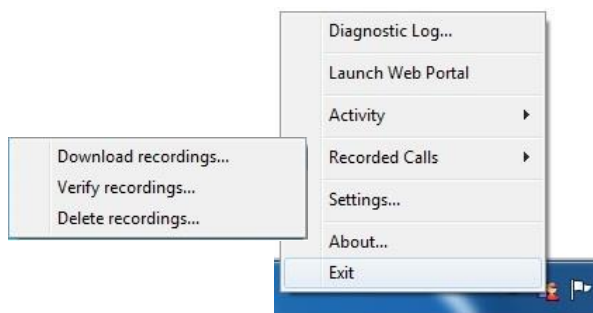
The first important step is to establish where you want recorded calls to be saved. Select; Phone Buddy - Settings – *Recorded Calls*

Select or create a folder at the location of where you want downloaded audio files to be stored. The default location is C:\ProgramData\IP telephone\Recordings.
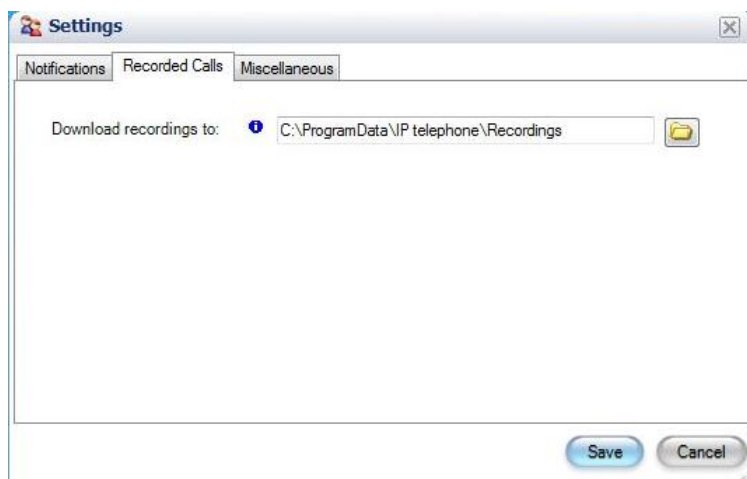
Once you have established the folder location click *Save* to confirm.

9.2. Call Recording Storage

Call recordings are stored securely online for 6 months. After this period they are automatically deleted, although auditable records of all call recordings are kept online indefinitely.

There is charge associated with storing Call recordings that is levied each month based on the maximum storage used that month. Details of current storage levels can be found on the Company – Recorded Calls History – *Recorded Calls History* menu on the portal website.

The Administrator can delete call recordings before the 6 month deadline and in this case, as well, auditable records of all call recordings are kept online.

The Administrator can download all, or any, call recordings to local storage at any time. Downloading does not automatically delete online recordings, this must be done as a separate action.

One minute of audio recording in MP3 format creates a file size of 0.14 Mb

9.3. Bulk Download of Call Recordings

Select; Phone Buddy - Recorded Calls – Download recordings – *Recordings search*

Enter the start and end date and time by clicking on the calendar icon 🗓 for the date and the pull down for the time and confirm your selection by clicking on the search icon 🔍.

Phone Buddy will then display under the *Search Results* tab, the matching online call recordings it has found.
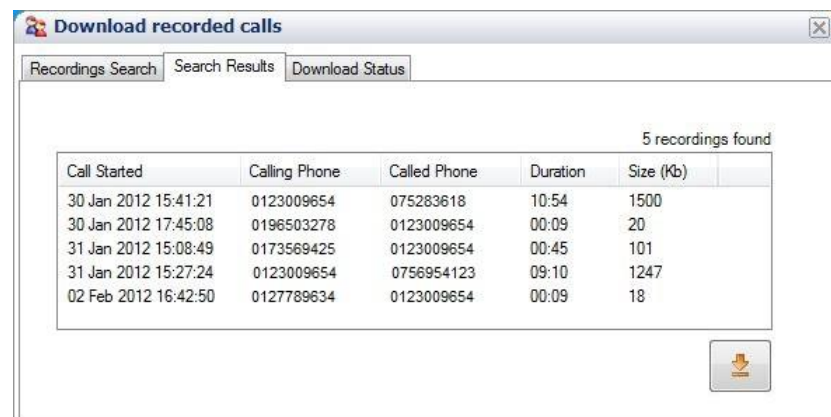
If the list of call recordings is correct then click on the download icon and downloading will commence to the location you specified in Phone Buddy - Settings – *Recorded Calls.*

You will be immediately switched to the Download Status tab where you can monitor the progress of each call recording being downloaded. Once downloaded the status changes from 'Not Started' to 'Download / verify completed'
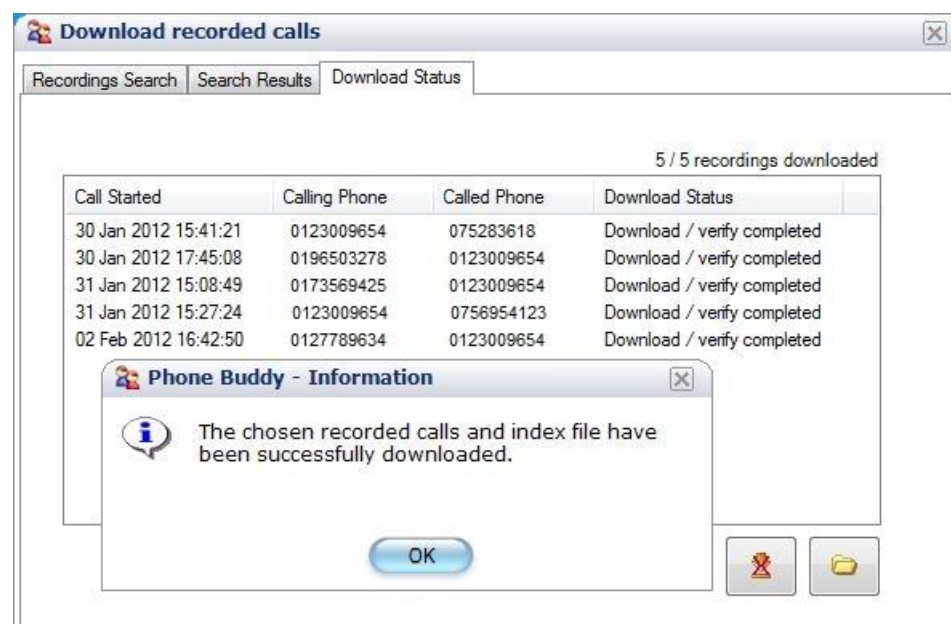
You can halt the download process at any time before it is finished, by clicking on the cancel download icon . You will see a message indicating that call recording download was aborted. This applies to the file being downloaded at the time and all subsequent files on the list. All previous downloads will have been completed.

Hovering over any call recording on this list will show the audio file size created.

If you want to check on the files created by the download process, click on ⬜, the file view icon and you will be taken to the directory of the location you specified for the storage of call recordings. There you will see an MP3 audio file for each of the calls you downloaded together with their associated recording index file held in PDF format.

Call Recording Download Index

Created: 03 Feb 2012 15:02:15

Created for: Gerald Lynwood

Company: Aardvark Enterprises

The following 5 call recordings were downloaded for calls made or received between 01 Dec 2011 00:00:00 and 03 Feb 2012 23:59:00.

File	Size	Checksum
20120130-154121-0123009654-075283618.mp3	1500Kb	5d0364027b37b4e26d94ed9d52b07f99b4f8b3fd
20120130-174508-0196503278-0123009654.mp3	20Kb	99d5f8bae6acc94d2318a939bce352510092dcba
20120131-150849-0173569425-0123009654.mp3	101Kb	7ad745d6cec6b9ded55e6825334eb0f158a51c2d
20120131-152724-0123009654-0756954123.mp3	1247Kb	389729546e4df1b6d8ae7e8de06877e173151fc2
20120202-164250- 0127789634-0123009654.mp3	18Kb	b994dbebbe4e4ed37b695d5d67d2b67a1197002f

10. Verification of locally stored Call Recordings

10.1. Verification Method

A facility is provided to ensure that downloaded call recordings have not be altered or tampered with in any way since they were initially downloaded. This is achieved by using an algorithm that assigns a unique checksum value to each call recording file. Once a file has been downloaded it can be verified by generating the new checksum value and comparing it with the original online file's value. If the audio file has been altered in any way, the checksum values will not match and verification will fail. Remember even if a call recording has been deleted from online storage a record is always kept of that recording with its checksum value.

10.2. Verification Process

Select; Phone Buddy - Recorded Calls – Verify recordings – *Recordings Folder Selection*

Use this panel to identify the call recordings you wish to verify by selecting the folder containing the recordings and, optionally, the associated recording index file.

Locating the right call recording

Each download creates a new folder in the location you specified for call recordings in Settings – *Recorded Calls*. The name of the folder reflects the date and time the download was made and folder created. For example a folder created on the 19th January 2012 at about 3:35 in the afternoon will have a folder name of 20120119-153529 (Year, month, day - hour, minute, second).

The naming of the actual call recording audio files is similar but reflects the date and time when the call was made and which phone numbers the call was between, so a typical file name would be 20120130-0123009654-075283618.mp3. Therefore, the format here is (Year, month, day – phone number making call – phone number receiving call).

The naming of the associated recording index file is the same as the folder with '–RecordingsIndex.pdf' appended e.g. 20120203-162457–RecordingsIndex.pdf

To be clear the phone number against which the recording is made is the number that answers the call, not necessarily the number that was originally called as Call Divert and Call Forwarding may have transferred the call.

Once the correct folder has been identified click on the *Refine Selection* icon ⬚ , which will take you to the *Recordings File Selection* tab where you can further select the files within the folder you wish to verify. Either select all items or choose individual call recordings by clicking on the tick box next to the file name.
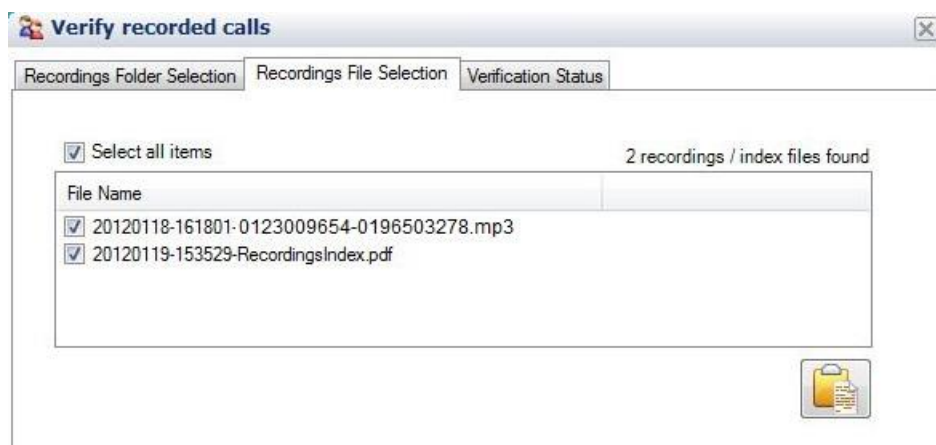
Having selected the call recordings to be verified, click on the ⬚ *Verify recordings* icon.

Each file will be verified in turn against the online record and if completed successfully will bring up the information box shown above. However, if there is anything amiss the following information box will appear.

The call recording files that failed are shown in a different colour with the tag 'Verification failed'. This implies that the file has been altered in some way.

11. Bulk Deletion of Call Recordings

Once call recordings have been saved locally they may be deleted from online storage. While this may be done via the portal website via the Company – Recorded Calls History – *Recorded Calls* menu they can only be removed one at a time. Using the call recording facilities in **Phone Buddy**, multiple call recordings can be deleted in one go.

Select; Phone Buddy - Recorded Calls – Delete recordings – *Recordings Search*

Enter the start and end date and time by clicking on the calendar icon ▦ for the date and the pull down for the time and confirm your selection by clicking on the search icon 🔍. **Phone Buddy** will then display under the *Search Results* tab, the matching online call recordings it has found.

Select the call recordings you want to delete by clicking on the tick box next to the file name, or select all items as appropriate. Then click on the file deletion icon ✕ to carry out the action.

At first a request for confirmation is displayed.

The Delete Status tab is brought up together with confirmation of successful deletion of the selection call recordings.
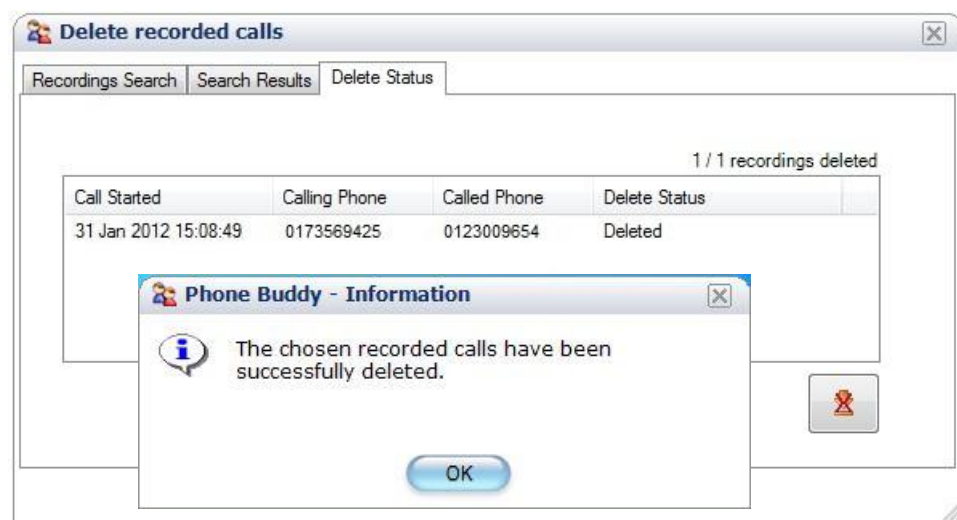
If many files are being deleted the process can be stopped by clicking on the cancel deletion icon . Files already processed will remain deleted.

12. CALL QUEUING

This section is designed to help you get the most out of the Call Queuing feature, which is part of your 'Gold' Subscription.

Call Queuing is designed to be used in situations where you will typically get more calls than your staff have the ability to answer at any given time. The aim of the feature in those situations is to hold the excess callers in a "queue" until such time as their call can be presented to the originally called number (and hence any associated features you may have set up on that number). An example of its use might be in an overloaded support department.

More specifically, Call Queuing is useful in situations where a call cannot be immediately presented to any of the set of target phones associated with the current feature (for the current Business Period if "Time Based Routing" (TBR) is also being employed). Once a call has been presented (i.e. one of the target phones is ringing) if the user of the phone decides to ignore the call, the usual rules associated with the prevailing feature will be employed – e.g. if the phone has been set up to forward calls to Voice mail when busy, and the user decides to ignore an incoming call presented to them that has first been queued – the call will go to Voice mail and not be placed back on the queue.

Call Queuing allows the Administrator to set up queues, associate each queue with an appropriate phone number (on a real handset or a virtual number) and then manage the activity of queued callers across those phone numbers.

When associating a phone number with a queue you can decide whether external-only or all calls should be queued when the need arises.

For a more sophisticated caller experience, you can record and / or upload custom introductions as well as custom music tracks (a similar experience to that found in the Music On Hold feature) to form what queued callers hear while they wait.

12.1.   Using Call Queuing

There are 3 basic steps to configuring Call Queuing. Each step is accessible from a separate submenu item under the "Company - Features - Call Queuing" menu.

Select; Company – Features – Call Queuing…
1 (…Tracks) Record / upload any introductory announcements or music tracks / messages - as audio files or recorded via one of your company phones.
2 (…Queues) Define the distinct queues that you will need in your company
3 (…Phones) Associate individual phones with relevant queues

12.2. Call Queuing "key features"

What is a Call Queue

The Call Queuing concept centres on the idea of a *Call Queue* which has the following configurable characteristics:

- A unique name
- A maximum number of supported calls in the queue (1 – 10)
- Where to transfer a call if the queue is "full" (busy, Voice mail, number)
- A maximum time a caller can be held on queue (2 - 120 mins)
- Where to transfer a call if it times out on the queue (Voice mail, number)
- An optional introductory track – you can decide what to play before the main music track(s):
  - Nothing
  - A default introduction
  - A track you have previously recorded
- Repeat introduction – if you wish to replay the chosen introductory track
- Progress indicator – you can decide if and how the user is informed of their progress in the queue – options being:
  - Not informed
  - A generic "moving up the queue" message
  - A description of the ordinal position within the queue (if < 10th in queue, otherwise generic message)
  - A description of an estimated wait time until the call is answered based on recent historical averages
- Main track policy – in the same was as Music On Hold you can choose to play default or custom music tracks, and choose sequential or random behaviour when playing subsequent ones

In several places within the Call Queue definition you can use the moniker **[CLI]** to describe "the originally called number". This allows you to assign the same queue definition against multiple phone numbers if you choose to – in this case **[CLI]** is substituted at run-time with the appropriate number. If this concept sounds familiar, it is because it's also used when defining menus within the Auto Attendant.

When to queue a call

The factors the Call Queuing engine takes into consideration when deciding whether to queue a call originally made to a particular phone X or not are quite involved and include:

- What prevailing feature is in play (for this current Business Period if TBR is on for the Phone X)
- What set of phones this could conceivably translate into being able to call (we call these "candidate targets") – which once again is highly dependent on this prevailing feature e.g.
  - If "Forward All Calls to Voice mail" is switched on – the call will not be queued but will go to Voice mail

- If "Call forwarding" is switched on – the total set of (non-PSTN) phones that could be called needs to be evaluated e.g. a Sales Group with 6 phones plus a Reception Group with 2 phones would give a total of 8 phones to check
- For each phone that could be called, whether that phone is contactable (is "registered" with the system)
- For each phone that could be called, whether the operator of that phone has opted out of being called (has DND switched on)
- For each phone that could be called, whether that phone is currently either in another call or being rung as part of another call
- For each phone that could be called, if that phone is itself associated with a separate Call Queue, whether that queue has any associated calls waiting itself

At the end of the above assessment, if even one phone appears to be contactable the call will be routed as normal (i.e. bypassing Call Queuing). Otherwise, if no phones appear to be contactable, the caller is queued and the status of the previously identified "candidate targets" is periodically re-evaluated.

12.3.   Configuring Call Queuing

This section describes the panels you need to interact with in order to set up the Call Queuing feature for your chosen phones. All the functionality is available to the System Administrator off the top-level "Company" menu in the portal.

The "default" experience

Call Queuing has been designed to be easy to get set up if all you require is a basic queuing mechanism. To that end a "Default Queue" has been provided with the following "presets" for the aspects outlined in the "key features":

- Maximum number of calls = 5
- Transfer if full to "busy signal" (avoids incurring charges)
- Maximum wait on queue = 20 mins
- Transfer if queue timeout = Voice mail of "originally called number"
- Introductory track = Yes - a default generalised message
- Repeat introduction = No
- Progress indicator = Generic message "moving up the queue"
- Main track policy = "Play tracks one after the other"

Using this queue – and the associated default options – would mean that all that was required to do to get basic queuing working would be to associate this default queue with a phone that had a Gold subscription, as described in the section "Assigning Call Queues to phones".

12.4.   Call Queuing Tracks

Select; Company – Features – Call Queuing – Tracks

The panel is used to configure any custom tracks to be used within Call Queuing. Tracks can be one of two types: Introduction or Standard.

You can create either type of track by uploading audio files or by recording them from your phone. These can then be used within the main Call Queue definition described in the section following this one.

Call Queuing Tracks

This panel allows you to manage your company Call Queuing Tracks.

If you prefer not to use the default one, you can create a general introductary message either using your phone, or you can upload a previously recorded audio file as the introduction.
For the main tracks themselves, you can upload previously recorded audio files. You can create up to 999 tracks, and can change the name of a track or its description.
Once your tracks are uploaded and validated by the system, you can navigate to the 'Queues' panel to make use of them while managing your company Call Queues.
NOTE: Uploaded files should be PCM wav format with the following attributes: 8Khz sample rate, 16-bit samples, mono (single channel).

Name	Type	Status	Recorded	Duration	Source	Actions
Sales Introduction	Introduction	Valid	23 Jan 20:39	00:06	Recorded	✕ ⊗ 🗋 🗐
Support Introduction	Introduction	Valid	23 Jan 20:40	00:06	Recorded	✕ ⊗ 🗋 🗐
Sales Msg 1	Standard	Valid	23 Jan 18:20	00:03	moving_up_q_generic.wav	✏ ✕ 🗋 🗐
Sales Msg 2	Standard	Valid	23 Jan 18:20	00:02	moving_up_q_ordinal.wav	✏ ✕ 🗋 🗐
➕ 🔄						Page 1 of 1 1

Adding an introduction track

Click the ➕ icon to add a new introduction track. This will be followed by the following data entry form:

Add New Call Queuing Track

Track name: ACME Accounts Introduction

Description: Welcome on first queuing

Track type: Introduction ▼

SAVE

Enter a name for your track and a brief description for future reference.
Choose a Track type of "Introduction" from the list.

Press SAVE to add the placeholder for the new track.

This will create a track entry with a status of '**Not Provided"'.** The next step is to upload or record the actual announcement for this track.

Adding a standard track

This is done in the same way as for introduction tracks except the "Track type" should be set to "Standard" rather than "Introduction".

Uploading tracks

An existing recording may be uploaded. The file to be uploaded must be a PCM encoded WAV file which has been recorded at a sample rate of 8KHz, with a sample size of 16bit and in mono - for a bit rate of 128kbps. There are several programs available that can convert files to this common format. To help confirm the file has been correctly recorded, right-click on the WAV file in Windows, and (depending on version) and choose 'Properties', and then the 'Details' tab. The bit rate should be shown:

NOTE: Files not in the correct format will be rejected by the portal.

Click the 🔲 icon to upload an existing track. It is important that this recording is in the correct format.

Two buttons are now displayed. Click the 'Add file' button 📄 and you are presented with a standard file selection window. Select your audio file and close the window.

Call Queuing Tracks

This panel allows you to manage your company Call Queuing Tracks.

If you prefer not to use the default one, you can create a general introductary message either using your phone, or you can upload a previously recorded audio file as the introduction.
For the main tracks themselves, you can upload previously recorded audio files. You can create up to 999 tracks, and can change the name of a track or its description.
Once your tracks are uploaded and validated by the system, you can navigate to the 'Queues' panel to make use of them while managing your company Call Queues.
❓ NOTE: Uploaded files should be PCM wav format with the following attributes: 8Khz sample rate, 16-bit samples, mono (single channel).

Name	Type	Status	Recorded	Duration	Source	Actions
Sales Introduction	Introduction	Valid	23 Jan 20:39	00:06	Recorded	✕ ⊗ 🔲🗐
Support Introduction	Introduction	Valid	23 Jan 20:40	00:06	Recorded	✕ ⊗ 🔲🗐
ACME Accounts Introduction	Introduction	Not provided				✕ ⊗ 🔲
Sales Msg 1	Standard	Valid	23 Jan 18:20	00:03	moving_up_q_generic.wav	✎ ✕ 🔲🗐
Sales Msg 2	Standard	Valid	23 Jan 18:20	00:02	moving_up_q_ordinal.wav	✎ ✕ 🔲🗐

➕🔄   Page 1 of 1 **1**

Upload Call Queuing Recording for 'ACME Accounts Introduction'
Please select a .wav file by clicking on the 'Add File' icon below. When you have chosen the correct file, press the 'Upload File' icon below to begin the upload. NOTE: The audio file must have been recorded at a sample rate of 8Khz, with a sample size of 16 bits and in mono. Otherwise the upload will fail.

📄 Add File
🔲 Upload File

If you have selected the wrong file you can choose a different file by clicking ✕ or continue on to upload the file by selecting 🔲.

Upload Call Queuing Recording for 'ACME Accounts Introduction'
Please select a .wav file by clicking on the 'Add File' icon below. When you have chosen the correct file, press the 'Upload File' icon below to begin the upload. NOTE: The audio file must have been recorded at a sample rate of 8Khz, with a sample size of 16 bits and in mono. Otherwise the upload will fail.

📄 Add File
🔲 Upload File

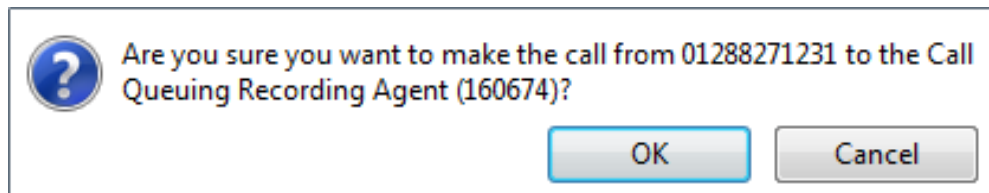Following an uploading progress window you will see the status change to "Validating"

It can now take up to 5 minutes to validate and distribute the file around the system.

You can check the status by clicking the refresh button 🔄. Once the file has been successfully processed the status will change to "Valid"

If the status changes to "Invalid" there was a problem with the recording, which must be corrected before the file is uploaded again. This is almost always a format problem so check that it is in the correct format as detailed above.

Recording tracks via a company Phone

Click the ⭐ icon to record via your default phone. You will be presented with the normal "click to dial" confirmation window.

Click ⬚OK⬚ and your default phone will ring. When answered, you will be asked to press any key (on the phone) to continue. At this point you must wait for the beep before starting and terminate the recording by pressing #.

After completing your recording you will be presented with 3 options

- Press 1 to accept the recording
- Press 2 to listen to the recording
- Press 3 to re-record the recording

You must accept the recording before hanging up or you recording will be lost.

Once recorded the panel shows the status as Valid and the Source as "Recorded".

The other *Action* icons available are:

Download track

Click the 🔲 icon to download an existing recording. You will be presented with the standard file download panel in your browser.

Edit track name

Click the ✏ icon to change the recording name.

Delete track

Click the ✕ icon to delete an existing recording. You will be presented a standard message box to confirm the deletion.

12.5. Call Queues

Select; Company – Features – Call Queuing – Queues

The panel is used to define queues which may each be associated with one of your relevant company phone numbers in due course.

The first time you navigate to the panel you will see a single "Default Queue" pre-installed. This has some general characteristics defined as set out in the section above called "The default experience".

The details of this default queue cannot be changed by design.

If you wish to customise that experience click on the ✛ icon to create a new queue. This allows you to customise the several facets of a new queue. You can:

- Choose a unique name for the queue.
- Define the maximum number of calls a queue can have, and what to do with new calls after this number is reached.
- Choose how long callers wait in the queue and what happens if their call has not been answered within this wait time.
- If you want an introduction to be played when a caller is first queued, choose either the default one or one you have previously uploaded by using the "Include Intro" picklist. You can also decide here whether to repeat the

introduction every so often during the waiting process – to remind callers why they are being queued.

- Choose if / how you want to relay progress up the queue to a caller. You can configure the system to give generalised or more specific progress reports which will play between the music tracks / messages you have selected to play.

Call Queue Name	Type	Max Calls	On Max	Timeout	On Timeout	Track	Actions
Default Queue	Standard	5	Busy signal	30:00	Voicemail for [CLI]	Play titles one after the other	

Page 1 of 1 1

Add New Call Queue

Call Queue Name:	ACME Account Queue	Type:	Standard ▾
Max Calls:	10	On Overflow:	Present Busy signal ▾		Use [CLI]
Wait Timeout:	120	On Timeout:	Divert to Voice mail ▾	[CLI]	Use [CLI]
Include Intro:	Sales Introduction ▾
Repeat Intro:	☐
Progress Indicator:	Wait time ▾

| Custom Tracks Only: | ☐ |
| Track Selection: |

	Name	Duration	Description
☐	Custom Track 1	00:09	Custom Track 1
☐	Custom Track 2	00:06	Custom Track 2
☐	Custom Track 3	00:07	Custom Track 3
☐	Custom Track 4	00:09	Custom Track 4
☐	Custom Track 5	00:09	Custom Track 5
☐	Custom Track 6	00:10	Custom Track 6
☐	Custom Track 7	00:17	Custom Track 7
☐	Custom Track 8	00:09	Custom Track 8
☐	Custom Track 9	00:15	Custom Track 9
☐	Custom Track 10	00:11	Custom Track 10
☐	Custom Track 11	00:12	Custom Track 11
☐	Custom Track 12	00:18	Custom Track 12
☑	Play titles one after the other
☐	Play titles in a random order

Page 1 of 1 1

SAVE

Finally, press SAVE to add the new queue, at which point you should see the it in the grid alongside the default queue:

Call Queue Name	Type	Max Calls	On Max	Timeout	On Timeout	Track	Actions
Default Queue	Standard	5	Busy signal	30:00	Voicemail for [CLI]	Play titles one after the other	
ACME Accounts Queue	Standard	10	Busy signal	2:00:00	Voicemail for [CLI]	Play titles one after the other	✎ ✕ ▢

Page 1 of 1 1

NOTE: some extra validation is incorporated within this panel that is designed to stop the accidental creation of issues within the system. For example, you can't transfer a call to the "originally called number" if the queue is full – as this would

just create a tight loop where calls were constantly hitting the system, being rejected due to the queue being full, and then returning back into the system to be rejected once more etc.

12.6.   Assigning Call Queues to phones

Select; Company – Features – Call Queuing – Phones

Select a phone that has the Call Queuing feature enabled from the list (i.e. those with a "Gold" subscription). Choose which Call Queue you want to apply to this number. Finally, you can control whether queuing is evaluated when internal calls are targeted at this number as well as for external calls.

When ready, click `SAVE` to switch Call Queuing on for this phone.

12.7.   Monitoring and controlling Queue activity

Real-time management

Select; Company – Features – Call Queuing – Queue Status

The System Administrator can monitor the number of calls currently waiting on a chosen queue by simply:

- selecting the name of the queue from the list (the virtual or real phone number(s) that the queue is associated with will be shown in brackets)

- selecting the phone number they are interested in

The status screen will be shown for the combination of chosen queue and associated phone. It lists the outstanding calls that have yet to be connected,

oldest call first. The list can be manually refreshed using the ⟳ icon, but in any case will automatically refresh every minute.

Call Queuing Status

The summary below shows activity on the call queues current in use across your company (that is, those queues that are currently assigned to a phone - which is shown in brackets).
You can choose a queue to monitor from the list and, for that queue, you can then manage waiting callers individually by changing their position in the queue (i.e. promote or demote them), or expiring them (they will be transferred in accordance with the timeout options defined for the queue).
Any call entries shown in red are already expired and will shortly be transferred.

Select a queue to monitor from the list of those defined against your company and in use.

Call Queue Name: Default Queue (01288271236) ▾

Phone number: 01288271236 ▾

Average Wait Time: N/a

Caller	Location / Additional details	Queued At	Expires At	Actions
01288271233	Damon Merridan	09:43	10:13	⬇✕
01288350819	Bude, Cornwall (South West)	09:44	10:14	⬆⬇✕
07976742192	Mobile Orange, Mobile	09:44	10:14	⬆✕
⟳				Page 1 of 1 1

The Administrator can also perform some basic operations on those calls such as:

- Moving an important call up the queue so it is answered more quickly by pressing the ⬆ icon

- Moving a call down the queue by pressing the ⬇ icon

- Expiring a call by pressing the ✕ icon:

Caller	Location / Additional details	Queued At	Expires At	Actions
01288271233	Damon Merridan	09:43	10:13	⬇✕
01288350219	Bude, Cornwall (South West)	09:44	**09:54**	
07976742192	Mobile Orange, Mobile	09:44	10:14	⬆✕
⟳				Page 1 of 1 1

An expired call will be highlighted in red as shown above. Shortly thereafter the call will be transferred in accordance with the timeout policy you have set for the queue.

Basic reporting

The system supports two types of report which can be run against custom queues (reporting is not supported for the default queue):

- Call queue ratios over a period

- Call queue volumes by hour of day / day of week

Select; Company – Reports – [Inbound calls] – [Call queue ratios]

The ratios report shows, across all company phones set up for Call Queuing, a simple ratio of calls that could be presented immediately to those that required queuing prior to presentation. Two ratios are included – number of calls and total call time.

(Note that the report assumes that Call Queuing is switched on permanently for the phone numbers in question – as the report aims to filter out phone numbers that don't have Call Queuing switched on, before calculating the ratio of queued to presented calls) across those remaining numbers.
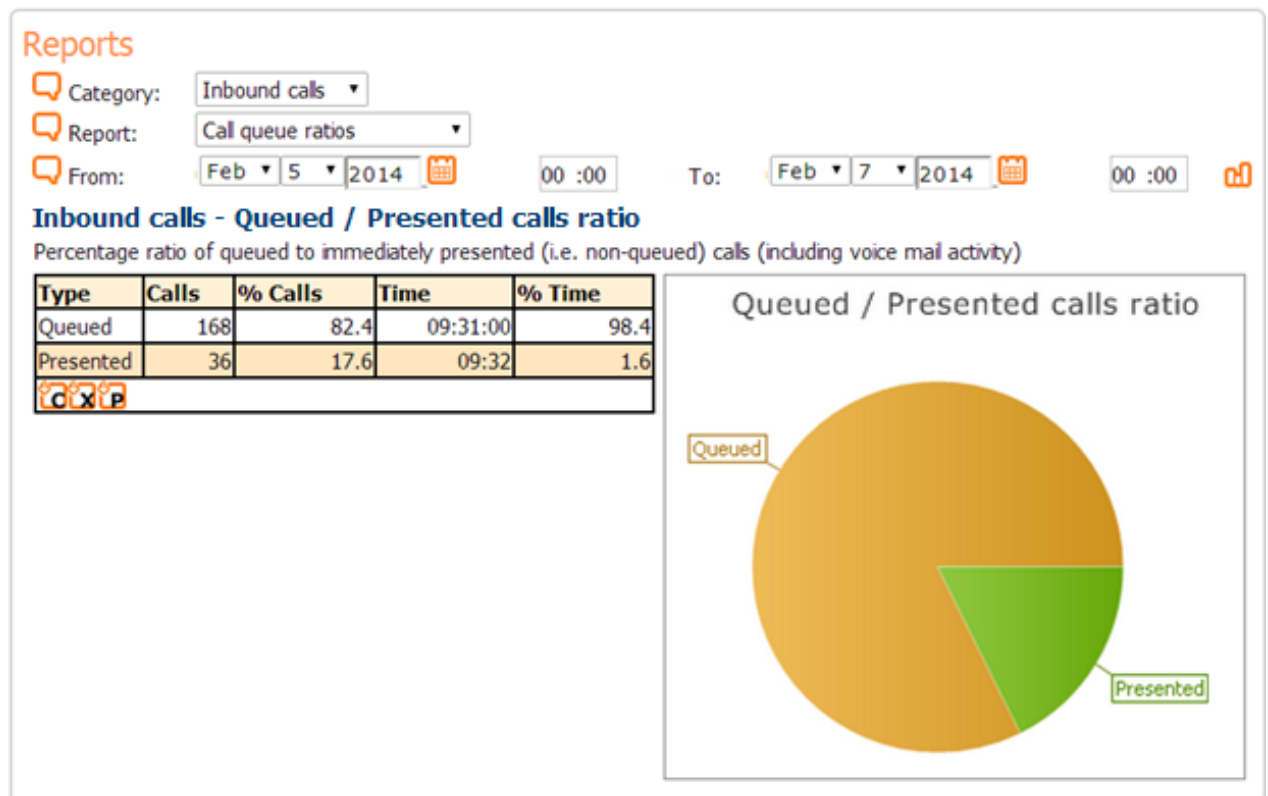
Once the report has been generated, you can export and download the report data into a comma-separated-values CSV file, XML or a PDF file by clicking on the appropriate button (C, X, P) in the bottom left corner of the grid.

Select; Company – Reports – [Inbound calls] – [Call queue volume]

The volume report shows the queue length and wait times across a day (by hour) or across a week (by day). This will give a rough idea of where the peaks in operator demand vs ability to field calls happen and to what extent callers are left waiting for an operator to become free.

Once the report has been generated, you can export and download the report data into a comma-separated-values CSV file, XML or a PDF file by clicking on the appropriate button (C, X, P) in the bottom left corner of the grid.

Reports

Category: Inbound calls ▼

Report: Call queue volume ▼

From: Mar ▼ 13 ▼ 2014 📅   00 :00   By: Hour of day ▼   📊

Inbound calls - Call queue volume

Summary of queued call volumes / wait times across the day.

Hour	Queued Calls	Wait Time
00:00	0	0
01:00	0	0
02:00	0	0
03:00	0	0
04:00	0	0
05:00	0	0
06:00	0	0
07:00	0	0
08:00	0	0
09:00	1	39
10:00	2	62
11:00	4	72
12:00	1	67
13:00	0	0
14:00	1	33
15:00	3	87
16:00	2	58
17:00	0	0
18:00	0	0
19:00	0	0
20:00	0	0
21:00	0	0
22:00	0	0
23:00	0	0

C X P

Queued calls by hour

Average wait time by hour
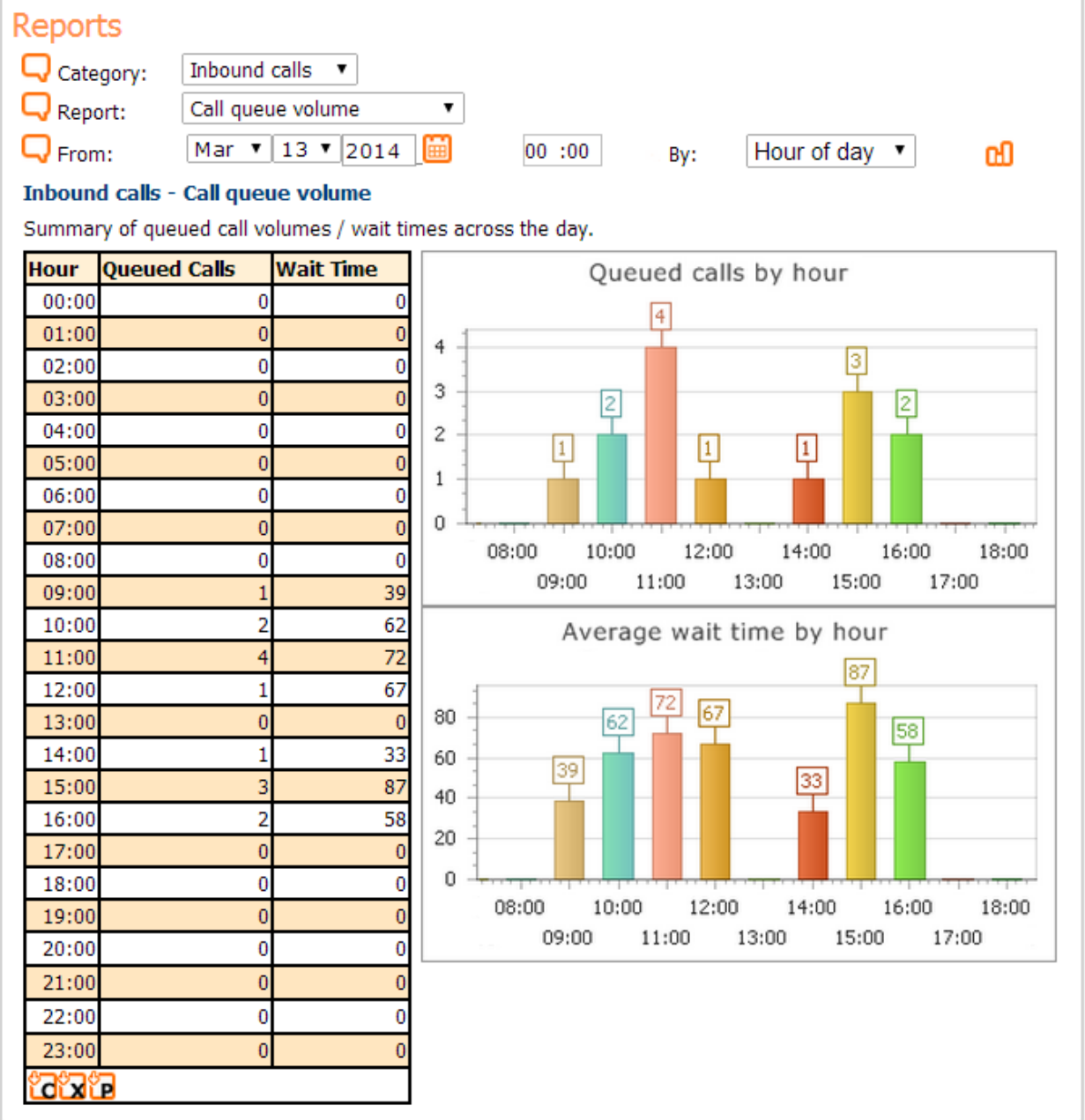
12.8. Caller experience while queued

Once the system determines that a caller must be queued, the following sequence of events should occur:

1. The caller may hear an introduction explaining why they could not be immediately connected (if they have selected a track for "Include Intro").

2. They should then hear the first / next standard music track or message (governed by the configured "Track Selection" policy).

3. Once completed, they may hear the introduction again (if "Repeat Intro" is switched on).

4. They may then be given an idea of their progress (depending on the selection for "Progress Indicator").

5. At this point control will return to step 2

This sequence will be repeated until they reach the top of the queue and then, either a target phone becomes available to present the next call to, or the caller hangs up.

However, whilst waiting on the queue, the caller can decide to terminate the call at any time by pressing the '#' key while a standard Call Queuing track is playing.

If they do this they will be transferred away from the queue in accordance with the policy you have set in the timeout options for the queue which can, for example, connect them to a private or shared mailbox, or ring another number you have defined to take overflow calls.

12.1. Other considerations

Behaviour with Auto Attendant, Time Based Routing etc.

Call Queuing can be applied to any type of "Gold" subscription. This means it is designed to cooperate with the other features that apply to CLIs like Call Forwarding, Auto Attendant (AA), Time Based Routing (TBR) etc.

So a typical scenario may be something like a sales line X which may be set up with the following characteristics during 9am – 5pm Monday - Friday:

- A "Gold" virtual number X defined to call forward sequentially to 2 call forwarding groups "ACME Sales1" and then "ACME Sales2" (if all phones in Sales 1 are busy) followed by "Voice mail for X"

- This is fronted by a simple AA menu which welcomes the caller before transferring them to X's aforementioned call forwarding plan
- X also has Call Queuing switched on so that if all phones in Sales1 and Sales2 are busy any incoming calls will be placed on the "ACME Sales Queue" until any phone in "ACME Sales1" or "ACME Sales2" becomes available to take the call. At this point the call will be transferred from the queue and represented to X

Outside those core operating hours X is configured to forward all calls to a shared Voice mail box Y. This overrides any queuing behaviour for X and all calls will be directed to the VM for Y.

What this means is that the queuing considerations for phones will alter around TBR boundaries so that calls coming in at 4:59pm are treated differently to those arriving at 5pm.

It also means that numbers with Auto Attendant menus configured for them will always be honoured when a call first enters the system targeted at that number. In addition, calls being routed back to the same number after a queue timeout will run the Auto Attendant menu again, allowing for the configuration of overflow scenarios.

Call Queuing custom message length considerations

A default set music tracks is provided out of the box. They are designed to be no longer than 3:30 in length. This is considered important because the reporting of progress being made by the caller within a queue is made between tracks – not during a track.

For that reason, if queue progress reporting is required, it is suggested that any custom tracks / messages be recorded around the 2-3 mins length.

Optimal phone set up for Call Queuing with existing features

To ensure Call Queuing works well with existing features such as Call Forwarding, it is suggested that phones have the Call Waiting option switched off. This can be achieved as described in the section "Call Waiting" within the document "Setup and User Guide".

Retrying the connection of a call at the head of a queue

As explained earlier, Call Queuing attempts to deliver incoming calls to one or more target phones and, for the most part, its responsibilities end there. So, once the caller reaches the top of the queue, if the resultant ringing call is not then answered by a staff member, the routing of the originally configured feature will kick in e.g. forward to Voice mail.

One exception to this rule is in the scenario where the Call Forwarding feature is being used and the configuration of that feature involves neither routing to Voice

mail nor an overflow number if nobody answers the call. In this unique situation, the call is not removed from the queue but will wait be held queued for a few seconds before retrying the connect to the target numbers. This retry mechanism will continue until either the call is answered or the caller hangs up.