



Administration Guide

26 Apr 2024



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Administration Guide

Product Description

Imagicle Advanced Queuing is the enhanced call queuing and distribution application that allows effective management of incoming calls without the need of expensive and complex call center systems. It allows accepting and managing high volumes of incoming traffic, keeping the calls in queues and playing music while waiting for an operator to become available.

Advanced Queuing is the perfect product for inbound telephony services: front-end operators, help desks, assistants. Advanced Queuing is mainly focused on:

- Providing a comfortable waiting treatment to the external and internal callers
- Optimizing calls dispatching and the operators work, raising the daily volume of managed calls
- Providing enhanced reports to monitor and tune the company incoming calls treatment

The web interface enables the administrator to design in a few steps either simple queuing services or more complex scenarios, including calendar schedules, backup routing, overflow treatments, leveraging the wide set of available features and the flexibility of the application.

Product Architecture

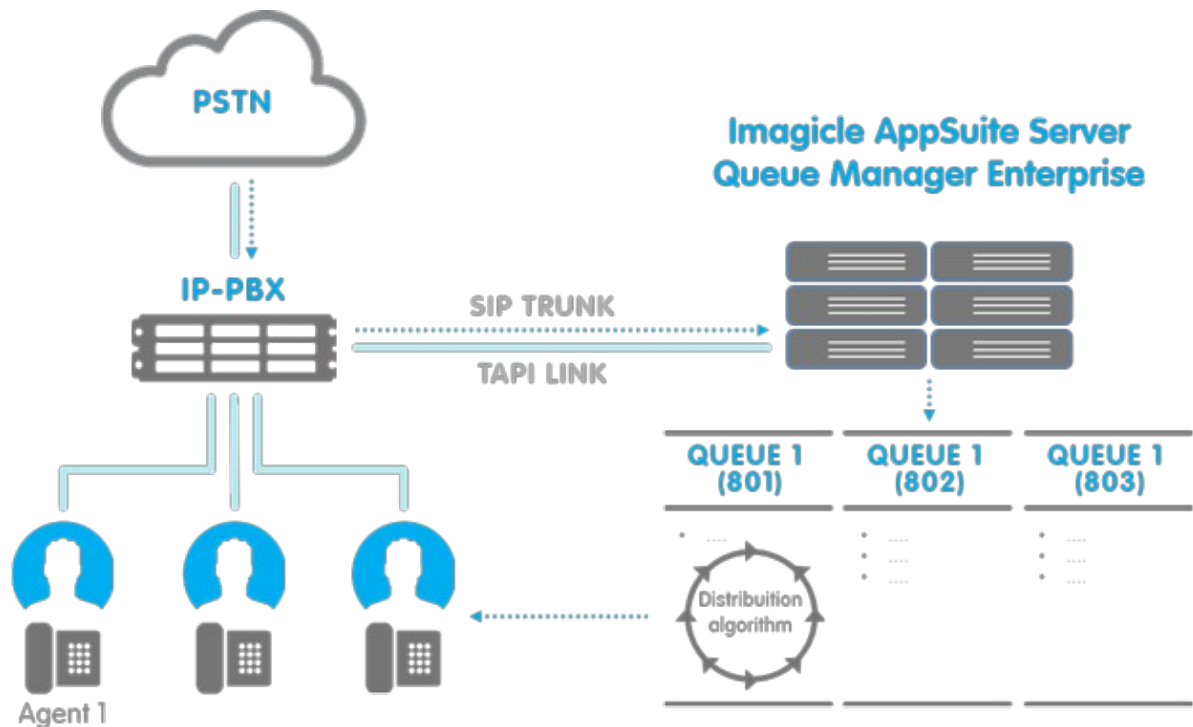
Imagicle Advanced Queuing is a voice application leveraging its internal SIP stack. Incoming calls are accepted, answered and kept in queue by the application that applies the scheduled treatments and replay the configured voice prompt/music to the callers.

Once an agent/target becomes available, the application transfers the call to the target, so that the voice resource is freed and a direct call between the caller and the agent is managed by the Calling Platform.

Basically, Advanced Queuing interacts with Calling Platform in two ways:

- A **SIP trunk** to carry on voice calls to/from Advanced Queuing
- A **CTI link** (provided by a TAPI Service Provider) used to monitor the agents phone activity.

The image below is a high level representation of the application architecture and interactions.



Incoming calls are routed by your Calling Platform to the waiting queues depending on the called number (DNIS). In the case you need more complex rules, including interactive menu choices by the end user, you can leverage Auto Attendant in front of Advanced Queuing, for example to provide a service or a language pre-selection.

Incoming queues

An incoming queue is an entry point for incoming calls that need to be dispatched to one or more agents. Calls enter the queue and are dispatched to the first available agent or are held in queue while agents are busy.

Calls are managed in a FIFO fashion (first in, first out).

While waiting in queue, music on hold and other optional voice prompts are played to the callers.

Each queue is mainly associated to:

- A unique mnemonic name to identify the queue
- A unique telephone number (**DNIS**), that is the number to be called to enter the queue.
- A set of **destination targets** (agents or phone numbers) configured to answer the incoming calls.
- A set of programmed behaviours, based on time/calendar schedule and exceptions.
- A set of voice prompts.
- A login telephony number that agents can dial to login/logout themselves in the queue.
- A priority level in the range 1-10

Basically, the usual call flow that is applied when the queue is in service is the following:

Welcome Message => Waiting Music (loop) and optional wait voice prompts => Transfer to the agent

The priority level is considered when an agent is serving multiple queues: calls in higher priority queues will be served first by the system.

Treatments and behaviours

A **treatment** is an action that can be applied to the incoming call in a particular time interval or in a specific situation. Available treatments include:

- **Enqueue:** the call is put in queue waiting for an available agent. An optional configurable welcome message can be provided.
- **Drop:** the call is dropped by Advanced Queuing, usually applied when the call is out of service. An optional configurable voice message can be provided before hang up.
- **Transfer-to:** forwards the call to another phone number (maybe another queue, a mobile number, a backup hunt group, etc.). An optional configurable voice message can be provided before transferring the call.

A **behaviour** is basically a time interval or a particular situation that triggers a specific treatment on the incoming call. Following behaviours can be defined for each queue, they are listed in the increasing priority order they do apply:

- **Default behaviour:** this behaviour and the related treatment are applied out of any configured schedule. For example this can be used to set the queue out of service out of the scheduled days/time intervals.
- **Ordinary weekly schedule:** the weekly schedule that applies to the queue. Administrators can program treatments over the week specifying which treatments to apply in each configured time interval.
- **Holidays and special events:** these are scheduled exceptions that override the weekly ordinary schedule (for example the Christmas day or a special opening on Sunday).
- **Particular scenarios:** particular situation that trigger specific treatments, regardless of the programmed schedule. For example, particular treatments can be defined if no agents are available when the call arrives or if there is an overflow in the waiting queue.

Programming the queue means defining the possible behaviours with the associated treatments and voice prompts.

Destination targets

Imagicle Advanced Queuing dispatch queued calls to the first available destination target. Two kinds of destination targets can be configured for each queue:

- **Agents:** an agent is an UC Suite user associated to his/her primary extension. The agent needs to login the queue in order to receive calls.
- **Simple destination numbers:** a destination number is basically a phone number reachable by Advanced Queuing, for example an extension, an hunt group pilot, a voicemail pilot, an external phone number. Login is not required by this kind of targets in order to receive calls from the queue.

In both cases, Advanced Queuing tries to monitor the target phone number by the CTI/TAPI link, in order to optimise the call distribution and save the conversation times for reporting scopes. Advanced Queuing monitors the target phone and tries to transfer the call to a target when it sees it idle (not busy). Targets that cannot be monitored by TAPI (for example external numbers and a generic answering group) are engaged by the Advanced Queuing in a best-effort way, that is attempting to call them even if they are busy, eventually retrying later. Also notice, that some distribution algorithms don't work properly if one or more targets are not CTI-monitored (see the dedicated section for details).

Agents can **login/logout** in one of the following ways:

- Calling the login phone number of the queue from the agent extension: a simple responder will answer playing the actual status (logged in/logged out) of the agent on that queue
- Using the login/logout web page, in the UC Suite web portal
- Using the Attendant Console client (if available and licensed)

Calls distribution algorithms

Advanced Queuing dispatches calls to the available targets using a distribution algorithm, that can be defined by the administrator specifically for each queue. This algorithm instructs the Advanced Queuing on how choosing the next agent to dispatch the next call in queue.

Destination targets are grouped into **escalation levels**. An escalation level is a group associated to a progressive number that is considered by some of the available algorithms in the case of no-answer escalation. Such algorithms try to engage an available target starting from the first escalation level; if nobody answers the call in the current escalation level, the algorithm raises to the next escalation level group, searching for another available target. Algorithms involving escalation levels also can have **sub-selection variants**, that are different policies used to choose the first agent when considering raising in the higher escalation level.

Following, a table representing the available algorithms and their sub-selection variants, with the description of how they work. Please, notice how some algorithms require that all target phones are CTI-monitored (TAPI) to make them working properly. If one or more phones are not monitored, the call distribution of such algorithms may be different from the expected one.

Please note that the algorithms never take into account how much time the agent was logged into the system. If needed, they calculate the time the agent spent on a call.

Algorithm type	Considers Escalation level	Requires CTI monitoring	Description	Sub-selections policies
Priority	Yes	Yes	Selects the available agent starting from the first escalation level. Escalates to next levels only when all agents in previous levels are not available or busy. This algorithm can be used to manage skill levels, balancing the load inside the skill group.	<ul style="list-style-type: none"> • Round Robin: inside an escalation level, selects the agent who had the oldest engagement. • Circular: inside an escalation level, always selects the next agent in a circular fashion (regardless of its last engagement).
Sequential	Yes	no	Scans for an available agents/targets starting from the first level. If a call is not answered by the current level, it escalates to the next level (no-answer escalation). If the call is not answered by the next escalation level, it loops back to the first agent group.	<ul style="list-style-type: none"> • Linear: inside an escalation level agents are selected basing on their position in the group (linear scan). • Round Robin: inside an escalation level, always selects the agent with oldest engagement. • Circular: inside an escalation level, always selects the next agent in a circular fashion (regardless of its last engagement).
Round Robin	No	No	Always selects the available agent with the oldest engagement. Escalation level and position in the group are not considered by this algorithm, that is focused only to load-balancing.	- None -
Idle Time	No	Yes	Selects the available agent that is idle for the longest time. Escalation level and position in the group are not considered by this algorithm, that is focused on the load-balancing.	- None -
Broadcast	No	No	All agents/destination phones are made ringing at the same time, the first of them answering will take in charge the call. Priority level is not considered by this algorithm.	- None -
On Demand ("pull")	No	No	This algorithm does not push the call to agents. By using their Attendant console, they can manually pick and answer a call from the waiting queue. The call remains in the queue until it is picked up by an agent or the maximum waiting time is over.	- None -

Decision tree

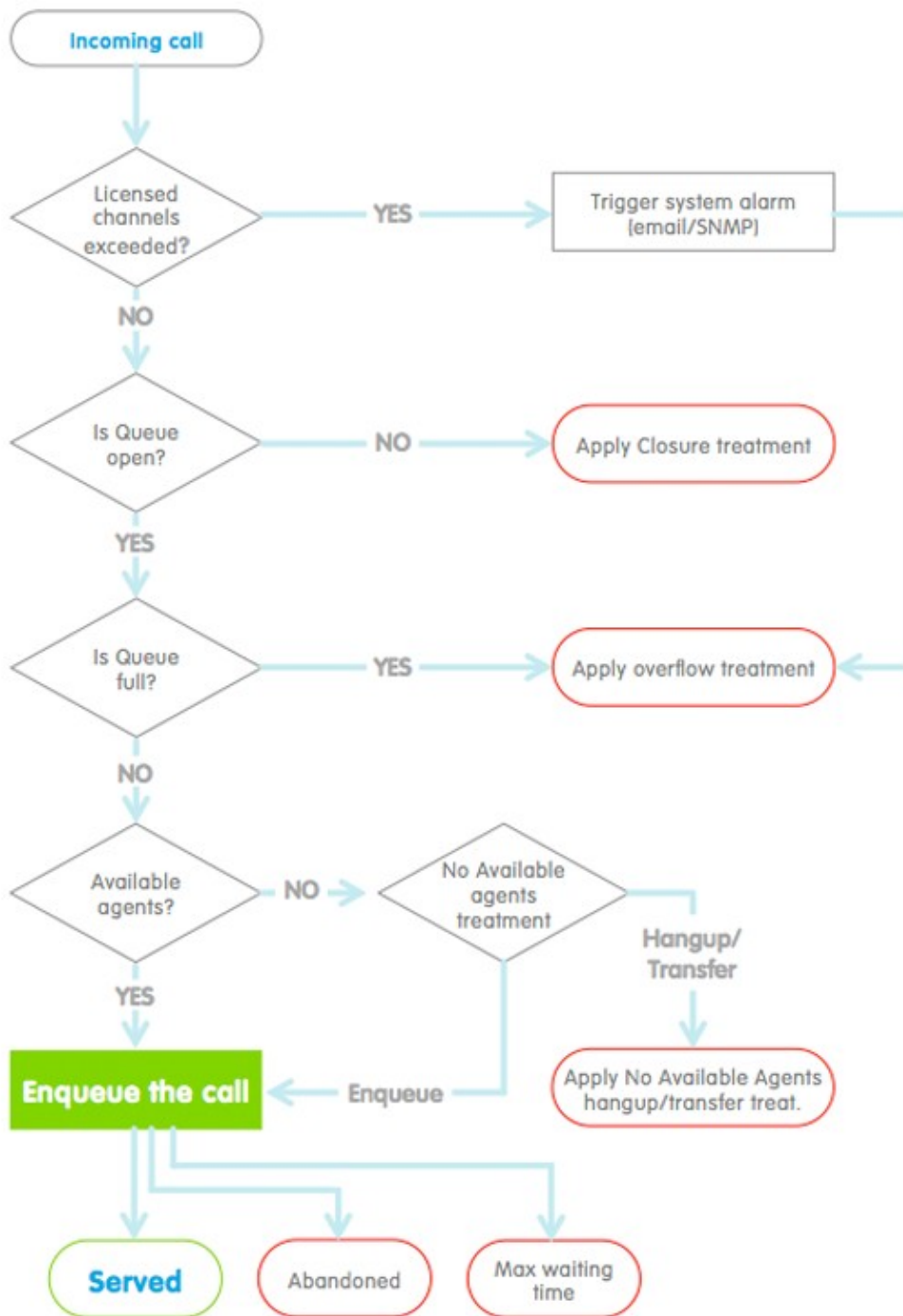
When a call is queued, Advanced Queuing evaluates a set of conditions in order to understand which is the right treatment to apply to the call.

Basically, it has to check if it has available resources (licensed channels) to manage the new call, understand the treatment scheduled for the current date/time and check if particular scenarios occur (overflow, no agents available, etc.).

The following schema depicts the decision tree that is evaluated by Advanced Queuing when a new call arrives to a queue number and the possible treatments that could be applied.

Once a call is enqueued for an agent, it can be:

- SERVED: answered by an agent
- ABANDONED: disconnected by the caller while waiting
- TERMINATED: dropped by the system because of time out (maximum waiting time)



Imagicle Contact Manager integration

Imagicle Advanced Queuing can lookup caller numbers into Contact Manager public directories content. If a match is found, two additional features are available:

- If the matched contact belongs to a directory marked as **VIP**, the call is managed by Advanced Queuing with higher priority respect to the other regular calls;
- Advanced Queuing can show the caller name on Attendant Console, when receiving a call from a contact whose number is available in a Contact Manager Directory.

Both these features will be available only if Contact Manager is licensed on the same machine.

Technical note: since Advanced Queuing performs an anonymous query on Contact Manager directories, only the contacts stored in Public directories will be considered.

Configuration Task List

Warning: you must install and configure the Application Suite before being able to configure the single applications. Please go through the AppSuite Deployment, Main Configuration, and User Management sections before reading on.

Full Configuration Task List

In order to create a queue and make it work, you need configure IAS users as usual.

Then to go through these main steps:

1. Configure PBX for QME
2. Create a queue
3. Edit basic settings
4. Configure special scenarios
5. Date/Time schedule
6. Configure voice prompts
7. Define the set of agents/targets that will serve the queue

The following paragraphs describe the configuration steps in detail.

Quick Configuration Task List

The configuration of all queue settings, behaviours, schedule and voice message can be skipped during creation: the queue will use default settings taken from the global settings configuration. You can change them anytime after the queue has been created.

The only settings that cannot be inherited and must be specified for each new queue are:

- **Queue name** (asked when adding a new queue)
- **Queue pilot number** (asked when adding a new queue)
- **Agents list** (in the "Call Distribution" tab)

Default global waiting queues settings

Default Settings configuration

Advanced Queuing Default settings can be configured from Imagicle web portal, selecting Advanced Queuing > Default Settings.

This page, that is organized like a regular queue settings page, allows to define the default settings inherited in all the queues.

Changing a setting value in this page will impact on all queues that are inheriting such setting (that is, all the queue that do not override those settings).

Below a list of most important settings you can tweak, split by tab:

Queue setting

- **Global Login/Logout number:** this is a login/logout phone number that enable the agent to login/logout on all queues he is working for. This is useful if an agent is serving multiple queues, to switch his login/logout status on all queues simultaneously. Notice that this phone number must be reachable through a route in the Calling Platform.
- **Delete data older than:** This is the retention period (in days) to keep CDRs related to queued calls. Set this parameter to 0 to keep CDRs for an unlimited time.
- **Maximum waiting time:** Maximum waiting time you wish to keep the caller party waiting for first available agent. Set this parameter to 0 for unlimited waiting time (not suggested!)
- **Behaviours tuning:** Within this menu, you can find different overflow options for no available agents, no queue resources and maximum wait time reached. Each overflow option can be set to play a message and drop or play message and transfer to an internal or external phone number or extension.

Time Table

- Within this tab, you can configure a common time table for standard week days + holidays. Moreover, you can also decide to force all queues closed or open, and apply relevant behaviour for day time and night time service

Voice messages

- This tab allows to customize common voice prompts to be included in all your queues. Multiple voice prompts can be uploaded from this interface, as standard MP3 or WAV audio files. You can also set voice prompts as interruptable or enable queue position announcement at the chosen frequency.

Call Distribution

- These parameters are useful to tune the way Imagicle Advanced Queuing tries to engage operators to serve queued calls:
 - ♦ **No answer timeout:** to ring an operator for nn seconds before skipping to next one
 - ♦ **Automatic logout agent:** If enabled, agent is automatically logged out upon no answer
 - ♦ **Max consultation calls per agent:** This parameter dictates the number of calls that might be dispatched to each operator. Keep this value to 1, if you don't want to dispatch a call to a busy operator. A higher value can be useful for operators without Attendant Console, to show them additional waiting calls on IP Phone display.
 - ♦ **After call - Wrap-up time:** If you wish to give some relief to an operator who just served a call, you can set wrap-up time to a value in seconds. This is the interval where operator is not engaged by further queued calls, to allow admin tasks or CRM updates.

PBX Configuration

Queue Manager Enterprise interacts with the PBX through the standard SIP protocol; it also monitors the agents or the internal extensions through TAPI.

Basically, the PBX configurations steps are:

- Create a SIP trunk (without registration) pointing to the Application Suite server (standard SIP port 5062)
- Create the rules to route the calls to the queue pilot numbers (e.g. all the calls to 7xxx -> go to QME SIP trunk)
- Allow the calls coming from the QME SIP trunk to the PBX to reach the agent
- Create a rule to route Smart park calls (Camp-on) to reach QME (e.g. all the calls to *xxx -> go to QME SIP trunk)

Besides, you should install a TSP on the Application Suite server (for more information please refer to the installation section of this guide).

Configuring the SIP trunk

Queue Manager Enterprise is seen by the PBX as a standard SIP trunk answering on the standard SIP port 5062.

The trunk must be able to transfer calls, that is, SIP call transfer must be enabled. When you create the trunk, also ensure that the PBX sends information on the calls transferrer (for transferred calls).

Routing the calls

A routing rule is needed to route incoming calls to the Queue Manager Enterprise server. The rule pointing to *Imagicle QME SIP Trunk* should be defined accordingly with the PBX numbering plan and with the queues phone number. Two or more rules may be needed, depending on the PBX brand and model.

The route rules and the other rules used to send calls to QME should never change the called party number. This way QME will be able to tell which calls are coming back from the operators or other queues.

Another route pattern must be defined to match the Camp-On prefix. Ensure that it allows to reach the configured prefix followed by other possible digits (digits used by our application to identify the parked call)

Example:

Camp-on Queue *3000

The route pattern to configure is *3000! (this allow to route every call starting with *3000, example *300011111-*300011112-ecc)

TAPI devices association

To allow QME monitoring the telephony activity of targets (agents or other internal phones), such devices must be monitored through TAPI. In some PBXes not all extensions are monitored by default.

In this case:

- If you do not want to use the Camp-on feature in Blue's Attendant, let the TSP monitor only the agents extensions
- If you want to use the Camp-on feature in Blue's Attendant, let the TSP monitor all the extensions

Additional charges and licenses may be required to monitor internal extensions through TAPI, depending on the PBX brand and model.

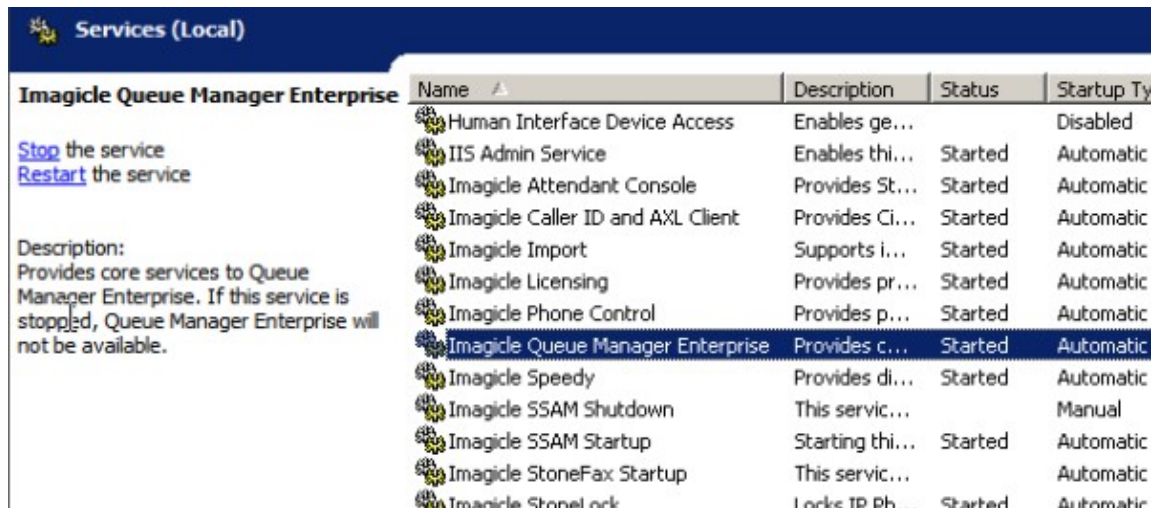
Starting the service

Queue Manager administrators may start Queue Manager Enterprise service from the web interface clicking on the Queue Manager Enterprise -> **Manage Service** link.

Queue Manager depends on the following services / programs:

- Imagicle Queue Manager Enterprise (QME.Core.Service.exe)
- Imagicle Phone Control (ApplicationSuite.Phone.ControlService.exe)

You can start them by logging on the server and running the Service Manager.



The screenshot shows the Windows Services (Local) console. On the left, there is a description for the 'Imagicle Queue Manager Enterprise' service: 'Provides core services to Queue Manager Enterprise. If this service is stopped, Queue Manager Enterprise will not be available.' Below the description are links to 'Stop the service' and 'Restart the service'. The main table lists the following services:

Name	Description	Status	Startup Type
Human Interface Device Access	Enables ge...	Disabled	Disabled
IIS Admin Service	Enables thi...	Started	Automatic
Imagicle Attendant Console	Provides St...	Started	Automatic
Imagicle Caller ID and AXL Client	Provides Ci...	Started	Automatic
Imagicle Import	Supports i...	Started	Automatic
Imagicle Licensing	Provides pr...	Started	Automatic
Imagicle Phone Control	Provides p...	Started	Automatic
Imagicle Queue Manager Enterprise	Provides c...	Started	Automatic
Imagicle Speedy	Provides di...	Started	Automatic
Imagicle SSAM Shutdown	This servic...		Manual
Imagicle SSAM Startup	Starting thi...	Started	Automatic
Imagicle StoneFax Startup	This servic...		Automatic
Imagicle Stonelark	Locks IP Ph...	Started	Automatic

License Activation

Queue Manager Enterprise is licensed per channel, regardless the number of agents and queues.

The number of licensed channels controls the total number of calls that can be handled simultaneously by the QME engine on one server.

All features, including Camp-on and G.729 codec, are available without need of further licenses.

Number of parked calls

The total number of calls that can be parked on the Camp-on queues is twice the licenses channels. E.g. if you bought a 4 channels license, you'll be able to park 8 calls (a total of 12 calls managed by QME engine, 4 on the waiting queues and 8 in camp-on).

Calls parked by the PBX do not consume channels.

Evaluation

During the 30 days free evaluation period you'll be able to serve 2 concurrent calls.

How to activate the license

To activate the license, follow the standard procedure you can find in the General configuration section.

When the license is activated for the first time (and its status changes from "Evaluation" or "Expired" to "Licensed"), you have to stop and restart the Queue Manager Enterprise service either from the web interface or from Windows Service Manager.

Statistics and Reports

Queue Manager Enterprise administrators can analyze the details of managed calls, performing some statistics on the available data.

QME stores in the database a Call Detail Record (CDR) for each call managed by a queue. Such CDRs include following information:

- Date-Time of call arrival
- Caller Number
- Queue name: the queue that has been called
- Waiting time: the time that caller has waited in queue.
- Conversation time: duration of the conversation with the agent (available if the agent is CTI-monitored). Starting from Imagicle 2024.Spring.1 release, the conversation time is properly calculated even if the SIP signaling and CTI events include different extension number. Just make sure to properly populate the "Local Country Code" field in [System Parameters](#).
- Destination number (Served by): the call has been transferred by QME to this number, typically a agent
- Classification: this is the outcome of the call. see below for details.
- Termination reason: the detailed reason for call termination.
- Logged agents: the total number of logged agents at the moment the call entered the queue.
- Waiting Calls: the total number of waiting calls at the moment the call entered the queue.
- Record Id: needed for diagnostics only. Useful to locate the call in log files.

Each CDR includes the **call classification**, that is the final treatment applied to the call. Possible values are:

- Unassigned: unknown, could appear only in the case of a fault or unexpected behaviors.
- Out of service ("Off Schedule" from 2021.Summer.1 release): the call arrived when the queue was closed.
- Refused: the call has been disconnected by the system.
- Abandoned: the call has been disconnected by the caller, while waiting in queue.
- Timed out: the call waiting time exceeded the maximum waiting time (the call has been disconnected or trasferred).
- Served: the call has been answered by an agent.

The **termination reason** field describes with more details the reason of call termination, that is when the call classification is *Refused*. This field is valued only when a particular scenario occurs and the application is programmed to refuse the call or when there are no more resources (licenses) to manage the call. E.g. when licensed channels are exceeded, the behavior "queue full" is triggered.

Possible values for this field are:

- Unassigned: this applies when the call classification is different form Terminated.
- Queue full: the incoming call caused an overflow; or the licensed channels are exceeded
- No available agents: the call has been disconnected because no agents were available when the call came in queue.
- Resources exhausted: no more licenses are available to manage the call.

CDR Data Retention

Administrator can configure Advanced Queuing CDRs data retention from web portal: Advanced Queuing â Default Settings â Queue Settings â Global System Settings. Default value is 731 days.

Time indication

All call start times are referred to the Imagicle server timezone.

For instance, if the server is configured on the USA EST timezone and a queue is configured on the UK London timezone, calls handled by such queue will be reported as arrived 5 hours behind the queue local time.

This time shift must be considered when reading a call details report and when applying a time filter.

Running the Reports

The Reports can be accessed through the web interface selecting the link on the QME menu.

Through the web interface, you can launch the following queue-based reports:

- Call Volume Analysis: shows number of calls and wait duration per queue and per outcome
- Time Analysis: analyzes waiting time per queue
- Trends: show the number of calls per outcome and time trend
- Trends for Avg Wait Time: shows average waiting time per outcome and time trend
- Service level: analyzes service quality for each queue
- Busy Channels Analysis: Shows peak, maximum and average number of channels used by QME over time, in 30 minutes intervals.
- Call List: shows call details records of all traffic managed by QME
- Interactive Call Detail Analysis

and the following agent-based reports:

- Agent analysis: Analyzes the agent activity by queue
- Agent Activity: Shows agents' activity detail records
- Interactive Agent Activity Log: Shows agents' activity detail in an interactive grid

Each report page is divided in two sections. The upper parts allows you to filter (restrict) the results selecting a group of relevant parameters (e.g. call arrival time, queue, waiting time...). The lower part shows the result, including graphics when available.

Once generated, each report can be exported in Excel, Word or PDF format, and also scheduled.

Interactive Call Detail Analysis report

Interactive Call Detail Analysis allows you to dynamically group and filter the call records. Here is how to do it.

- First of all, select a time range for the calls you want to analyze
- To filter the records, use the drop down lists in the column headers
- To group data by a specific column, just drag it to the bar at the top of the grid
- A checkbox allows to enable the extended version, showing all the fields

You can group by one or more column. When data are grouped, the total number of calls and the average values are calculated per group.

Filtering data

The table header include filtering capabilities for the data. Different column filters can be combined to extract the interesting portion of data. For example, setting a filter on the Queue column and on the Classification column, will extract all CDRs related to that queue, with selected classification.

Changing any of the parameters will update the report contents. CDR are reported in the order they have been generated by QME (descending order).

In the sample image below, you can see CDRs related to calls served by "Vicini Sonia" and subsequently transferred to ext. 999, grouped by date.


Filter calls from date:

To date:

Show extended version: ☐

Date

Refresh



DATE	TIME	WAITING TIME	CONVERSATION TIME	QUEUE	CALLER NUMBER	SERVED BY	TRANSFERRED TO	CLASSIFICATION
<div>[All]</div>					<div></div>	<div>201 - Vicini Sonia</div>	<div>999</div>	<div>[All]</div>
Date: 02/01/2019								
02/01/2019	11:49:32	00:00:07	00:00:30	IT-PO	0112238774	201 - Vicini Sonia	999	Served and Transferred
Calls: 1		Avg: 00:00:07	Avg: 00:00:30					
Date: 03/01/2019								
03/01/2019	17:47:58	00:00:11	00:00:55	IT-PO	058428041	201 - Vicini Sonia	999	Served and Transferred
03/01/2019	14:59:14	00:00:13	00:00:24	IT-PO	0322845433	201 - Vicini Sonia	999	Served and Transferred
03/01/2019	09:49:12	00:00:12	00:00:20	IT-PO	3290534953	201 - Vicini Sonia	999	Served and Transferred
Calls: 3		Avg: 00:00:12	Avg: 00:00:33					
Calls: 4		Avg: 00:00:11	Avg: 00:00:32					

Page 1 of 1

Page 1 of 1, items 1 to 4 of 4

Once generated, this report can be exported to Excel or CSV format.

Agent Analysis and Activity reports

The **Agent Analysis** report shows

- Answered calls
- Unanswered calls
- Short calls (<10 secs.)
- Avg answer time
- Maximum answer time
- Average conversation time
- Maximum conversation time
- Total conversation time
- Ready time
- Wrapup time
- Pause time
- Login time

Data can be filtered per date, agent and queue.

Once generated, each report can be exported in Excel or PDF format, and it can be also scheduled.

The **Agent Activity** report shows the following events:

- Date/time of activity start
- Activity duration
- Involved Agent
- Involved Queue
- Activity Executor user
- Event type
- Pause reason

Data can be filtered per date, agent, queue and pause reason. See below sample:

Report options

Run report

Schedule

<< < 1 of 3 > >>



Agent Activity

Date between 1/1/2023 and 11/17/2023, Agents: test2



Arrival time	Duration	Agent	Queue	Executor user	Event type	Pause reason
10/11/2023 17:20:55		test2	coda test3	test2	Login	
10/11/2023 17:20:52		test2	coda test2	test2	Login	
10/11/2023 17:20:52		test2	coda test1	test2	Login	
10/11/2023 17:20:32	0:00:23	test2	coda test3	test2	Logout	
10/11/2023 17:20:09	0:00:23	test2	coda test3	test2	Logout	
10/11/2023 17:13:25	0:07:27	test2	coda test2	admin	Pause	-
10/11/2023 17:13:04	0:07:05	test2	coda test3	admin/SASADMIN	Pause	lunch
10/11/2023 17:13:04	0:07:48	test2	coda test1	admin/SASADMIN	Pause	lunch
10/11/2023 17:11:58	0:01:27	test2	coda test2	admin	Logout	
10/11/2023 16:51:03	0:20:55	test2	coda test2	global_supervisor	Login	
10/11/2023 16:51:03	0:22:01	test2	coda test3	global_supervisor	Login	
10/11/2023 16:51:03	0:22:01	test2	coda test1	global_supervisor	Login	
10/11/2023 16:50:46	0:00:17	test2	coda test2	global_supervisor	Pause	coffee
10/11/2023 16:50:46	0:00:17	test2	coda test3	global_supervisor	Pause	coffee
10/11/2023 16:50:46	0:00:17	test2	coda test1	global_supervisor	Pause	coffee

Interactive Agent Activity Log report

Interactive Agent Activity Log allows you to dynamically group and filter the agents' activities. Here is how to do it.

- First of all, select a time range for the activities you want to analyze
- To filter the records, use the drop down lists in the column headers
- To group data by a specific column, just drag it to the bar at the top of the grid
- A checkbox allows to enable pause reason display in the rightmost column, with relevant pull-down filter menu.

You can group by one or more column. When data are grouped, the total number of entries and the average event interval are calculated per group.

Filter calls from date: 10/29/2023

To date: 11/23/2023

Pause reasons: Hide

Hide

Show

Drag a column header and drop group by that column

Refresh |

ARRIVAL TIME	DURATION	AGENT	QUEUE	EVENT TYPE	EXECUTOR USER
		[All]	[All]	[All]	[All]
11/20/2023 11:00:01 AM		test4	coda test3	Logout	test4
11/20/2023 10:59:08 AM	00:00:53	test4	coda test3	Login	SYSTEM
11/20/2023 10:59:05 AM	00:00:03	test4	coda test3	Wrap up	SYSTEM
11/20/2023 10:58:14 AM	00:00:51	test4	coda test3	Login	test4
11/20/2023 10:57:32 AM		test4	coda test1	Logout	test4
11/20/2023 10:57:31 AM	00:00:43	test4	coda test3	Logout	test4
11/20/2023 10:56:28 AM	00:01:03	test4	coda test3	Pause	SYSTEM
11/20/2023 10:56:28 AM	00:01:04	test4	coda test1	Pause	SYSTEM
11/20/2023 10:56:20 AM	00:00:08	test4	coda test3	Login	SYSTEM

Scheduling Reports

Scheduled reports are executed periodically and sent via e-mail.

To schedule a report, setup the filtering options and run it from the web interface. Once you are satisfied with the result, press the "schedule" button. You'll be asked when the report must be automatically executed, and the recipients' e-mail address check or edit these settings later, through the Scheduled Reports web page.

Call Distribution based on caller's area code

This article details how to configure Advanced Queuing to perform a call distribution based on caller country area code, provided the countries are among the ones built in into the Imagicle UC Suite (English, Italian, French, Spanish, German, Arabic).

If other languages are required, please get in touch with Imagicle for an on-project based customization.

Imagicle Advanced Queuing provides a built-in script that allows incoming calls to be automatically distributed to the proper queue by applying the following algorithm:

- all incoming calls arrive on <Orig_Q_N>, which the Original Queue Number;
- the script detects caller country area code;
- calls are then distributed to the proper <Language_Based__Q_N>[1-6] queue.

The localized queue numbers are composed by the original queue number with an appended suffix, as follows:

- <Orig_Q_N>1 for English and unrecognized languages
- <Orig_Q_N>2 for Italian;
- <Orig_Q_N>3 for French;
- <Orig_Q_N>4 for Spanish;
- <Orig_Q_N>5 for German;
- <Orig_Q_N>6 for Arabic;

As such, a call coming from +4989432652 to queue 8010 will be automatically routed to queue 80105, as 5 identifies German localized queue.

Configuration steps.

1. Configure two Route Patterns to route calls both to the main queue and to the localized ones (in this example, RPs are: 801X and 8010X);
2. Add in Advanced Queuing a new queue (number <Orig_Q_N>);

NAME	TYPE	ENABLED	QUEUE NUMBER	PRIORITY
Camp-On	Camp-On Queue	True		5
Treviso	Waiting Queue	True	8010	5

3. Go on edit queue settings, and select time table;

Queue Settings	Time Table	Voice Messages	Call Distribution	Permissions																																																																																																																
Programmed/Forced mode																																																																																																																				
Ordinary weekly schedule																																																																																																																				
<p>Sets here the ordinary weekly opening hours and behaviours of the queue. This schedule can be overridden by holidays and special events defined below in the dedicated section.</p> <p>Use global settings <input type="checkbox"/></p> <p>Add new schedule</p> <table border="1"> <thead> <tr> <th></th> <th>Monday</th> <th>Tuesday</th> <th>Wednesday</th> <th>Thursday</th> <th>Friday</th> <th>Saturday</th> <th>Sunday</th> </tr> </thead> <tbody> <tr><td>06:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>07:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>08:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>09:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>13:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>14:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>15:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>16:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>17:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>18:00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table> <p>⌵ Show 24 hours</p> <p>Sets here the default behaviour of the queue, that is used out of explicit schedule (weekly schedule and holidays/events).</p> <p>The default behaviour for this queue is Closed with treatment Play message and drop and voice prompt Closure goodbye</p> <p>NOTE: This behaviour is the general settings default. Edit</p>						Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	06:00								07:00								08:00								09:00								10:00								11:00								12:00								13:00								14:00								15:00								16:00								17:00								18:00							
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4. Select the proper time zone to apply time table.

Please, notice that the daylight saving time automatically applies to the selected time zone.

Queue Settings	Time Table	Voice Messages	Call Distribution	Permissions
<p>Select the time zone to be used for this service. The daylight saving setting for the specified time zone will apply. Please, notice that if you change the time zone the existing schedules (weekly calendar, holidays and special events) will be applied accordingly.</p> <p>Time zone: (UTC-05:00) Eastern Time (US & Canada)</p> <p><input type="checkbox"/> Use default settings</p> <p>Save Cancel</p>				

5. Click on "Add new Schedule" and unflag "use default settings"

Set "Closed" and "Voice Message" to built-in 'Script - Route by caller language'

Edit

Edit ordinary weekly schedule (referred to (UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna)

From hour

To hour

Apply on these days ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday ☐ Sunday

Queue Status

☐ Open

☒ Closed

Incoming call treatment

Play message and drop



☐ Use default settings

Voice message

A specific message












BuiltIn script - Route by caller language



This script transfers the call to a different number based on the caller number language. The destination is built-in script.

- For each language in scope, it is required to configure in Advanced Queuing the related queue, corresponding to the localized queue as per <Orig_Q_N> + suffix and associate to each of them the proper behavior. Suffix must follow the described pattern.

Imagicle
ApplicationSuite
for Cisco UC

























SUPPORTADMINLOGOUT

ACD

QueuesDefault SettingsAgents statusReportsScheduled ReportsManage Service

+ Add New Queue

NAME	TYPE	ENABLED	QUEUE NUMBER	PRIORITY	
Camp-On	Camp-On Queue	True		5	
Treviso	Waiting Queue	True	0010	5	  
Treviso-En	Waiting Queue	True	00101	5	  
Treviso-It	Waiting Queue	True	00102	5	  
Treviso-Fr	Waiting Queue	True	00103	5	  
Treviso-Es	Waiting Queue	True	00104	5	  
Treviso-De	Waiting Queue	True	00105	5	  
Treviso-Ar	Waiting Queue	True	00106	5	  

Refresh

Please note that it is always possible to also call directly any of the personalized queues using their relevant <Orig_Q_N> + suffix number.

Troubleshooting

How to use the troubleshooting guide

This page describes basic troubleshooting techniques and most frequent issues you may face during the application setup and usage.

The first part describes the basic tests to be made after you completed the configuration task list. Those test can reveal issues in the configuration and can help you to identify them.

The second part is a list of common issues and their causes. Look for the symptom and follow the tips. To know how to configure the product, please refer to the relevant pages in this guide.

Please understand that the problem may be related to complex PBX and network configurations, and that is not possible to list all them all. This guide must be considered as a tool to guess the origin of the issue.

Advanced Queuing engages an operator, but call is eventually transferred to his/her Voice Mail:

- From Advanced Queuing web portal, please go to **Queues** → **edit queue settings** → **Call Distribution** → **Advanced Settings** and verify that "no answer time out" value is lower than the related timeout value set in the PBX directory number for voice mail transfer:

No Answer Ring Duration (seconds)

Advanced Queuing can't properly route incoming calls to involved operators' phones, while "Broadcast" distribution algorithm is in use:

- Check that all phones devices (desk and softphones devices, including Jabber clients) assigned to queue operators are active. It is STRONGLY recommended to perform queue logout before turning off any operator's client device.

Advanced Queuing routes the call to the operator phone, however when the operator goes off hook, the call returns in the queue:

- Check that "Accept replaces header" flag is checked in Advanced Queuing's SIP Trunk Security Profile (Cisco UCM only).
- For other PBXs, please make sure that SIP "REFER" signalling is supported

Queue Supervisor does not access to Attendant Console's Dashboard:

- Check dashboard is not hidden (Attendant Console's top-left "View" menu).
- Check supervisor's queue permissions: it must be set to "Queue Supervisor" or higher level. See below:



Queue Manager

Queues

Default Settings

Agents status

Reports

Scheduled Reports

Manage Service

DEMO-IT (6390) - (waiting queue)

Queue Settings	Time Table	Voice Messages	Call Distribution	Permissions
Agents				
Permissions for agent users.				
NAME	USERNAME	EXTENSION	PERMISSION	
Fioravanti Tommaso	tommaso_fioravanti_i	229	Queue advanced supervisor	

&

An incoming call is queued, even if there are no available agents

- This is the expected default behaviour. Advanced Queuing delivers a "no available agents" audio message and the call is enqueued.
- If required, it is possible to change this behaviour by setting a different option in Queue Settings & Behaviour tuning

An incoming call is dropped, with an "office closed" voice prompt

- This is the expected default behaviour, when call reaches a closed queue, as per programmed weekly schedule.
- If required, it is possible to change this behaviour by setting a different option in Time Table & Programmed/Forced mode & Closed queue settings

Programmed queue opening time are not respected

- Queue Time Table is based on Time Zone pull-down menu, which is by default the time zone configured in Windows OS.
- If the queue should match a different time zone, please uncheck "Use default settings" flag and select proper local time zone.

Product Configuration

User Management Fields

Although Advanced Queuing can distribute the calls to any telephone number that can be dialled through the pbx, only UCS users can be Agents. Agents must have a UCS user properly configured in the users list. To be able to tell which line is associated to an agent, Advanced Queuing uses the primary extension and, if available, the Device Name. It is needed when the main line is shared between two or more phone devices.

Note: if the PBX does not add device name in the TAPI device name assigned to agent's phone, the agent line cannot be shared.

User permissions

The following access levels are defined for the Advanced Queuing application:

- **Administrators:** these users have complete management rights on the application. They can:
 - ◆ Create, edit and delete any queue
 - ◆ Start/Stop the service and edit application settings
 - ◆ Change the queues global settings
 - ◆ Monitor and change the login status of any agent
 - ◆ See the historical reports of any queue and any agent
 - ◆ Assign permissions to specific queues/users
- **Global Supervisors:** a supervisor has limited control on all queues. Supervisors can:
 - ◆ Edit existing queues settings, behaviours and agent list
 - ◆ View global settings
 - ◆ Monitor and change the login status of agents
 - ◆ See the historical reports of any queue and any agent
- **Advanced Global Supervisor*:** Same as Global Supervisor. In addition, the permission to trigger Silent Monitoring and Whisper Coaching on all queues' agents
- **Queue Managers:** administer only the queues they are assigned to by an administrator
- **Queue and agents observed r:**
 - ◆ can monitor queue statistics
 - ◆ can see calls waiting for the queue
 - ◆ Monitor and change the login status of agents
 - ◆ cannot change the queue settings but can read them
- **Queue statistics observed r:**
 - ◆ can monitor queue statistics
 - ◆ can see calls waiting for the queue
 - ◆ cannot see information on the agents of the queue, not even the name and surname and therefore not even the distribution list (agents privacy protection)
 - ◆ cannot change the queue settings but can read them
- **Queue Supervisors:** edit all the basic queue settings for every-day management
 - ◆ Edit queue timetable
 - ◆ Edit the agent list
 - ◆ Login/Logout queue agents
 - ◆ Manually switch the queue between statuses open/closed
 - ◆ See the historical reports of the queue
 - ◆ See real-time status statistics for queue and agents
- **Advanced Queue Supervisor*:** Same as Queue Supervisor. In addition, the permission to trigger Silent Monitoring and Whisper Coaching on own queues' agents
- **Advanced Agents:** can temporarily change the queue behaviour, and see advanced stats
- **Basic Agents:** usually reserved for the queue **agents**. These users:
 - ◆ Cannot create or edit queues, neither change any queue settings
 - ◆ Can see and modify their login/logout status
- **No Access:** users with this level do not see Advanced Queuing in the UC Suite web menu

Basic Agent is automatically assigned to an UCS user when it is configured as an agent for one or more queues.

*Silent Monitoring & Whisper Coaching are available from Imagicle 2018.Summer.1release and above.

Detailed Access List Table

The first column describes the operation, the second if the right to do that operation can be assigned per queue or if it applies to all queues.

The Administrators and Global supervisors operations implicitly apply to all queues. Users with other roles may perform the operations only on the queues they are assigned to. To allow them to perform such operations on other queues, you must explicitly assign them through the web interface.

Rights / Roles	Scope	Administrator (complete management)	Advanced Global Supervisor	Global Supervisor	Queue Manager	Advanced Queue Supervisor	Queue Supervisor	Queue and Agents Observer	Queue Statistics Observer	Advanced Agent
Create Queue	Generic only	X								
Delete Queue	Generic / per queue	X	X	X						
Assign managers to queue	Generic / per queue	X								
Assign supervisors to queue	Generic / per queue	X			X					
Assign observers to queue	Generic / per queue	X			X					
Assign agents to queue	Generic / per queue	X	X	X	X					
Change scheduled behaviours	Generic / per queue	X	X	X	X					
Change audio messages	Generic / per queue	X	X	X	X					
Change other queue parameters	Generic / per queue	X	X	X	X					
View agents status	Generic / per queue	X	X	X	X	X	X	X		
Activate manual queue behaviour	Generic / per queue	X	X	X	X	X	X			X
Pickup and answer calls										X**
Silent Monitoring & Whisper Coaching		X	X		X	X				
Read personal real time stats	Generic / per queue	X	X	X	X	X	X	X		X

Read all agents real time stats					X	X	X	X		
View calls waiting on any queue	Generic / per queue	X		X	X				X	X
View calls waiting on my queues	Generic / per queue	n/a		n/a	n/a	X	X	X	X	X
Manage scheduled reports	Generic / per queue	X		X	X	X				
View online and scheduled reports	Generic / per queue	X		X	X	X	X	X		
Login/Logout from my queues	Generic / per queue	n/a		n/a	n/a					X**
Change other agents login / logout status	Generic / per queue	X		X	X	X	X	X		

** Added automatically when the user is added to the queue distribution list.

Default settings

Most of queue settings can be inherited by default settings, that are a set of values that can be used as default values and shared by multiple queues. These include basic parameters, queue behaviours, date/time schedule and voice prompts.

In this way administrators can create multiple queues with similar behaviours and settings without spending a lot of time entering the same values for every queue. However, every setting can be overridden anytime with a queue-specific value (i.e. that will apply to that queue only).

In the image below, a sample of a parameter inheriting its value from default settings and another taking a queue-specific value (override).

Queue priority	<input type="text" value="5"/>		<input checked="" type="checkbox"/> Use default settings
Login/Logout telephone address	<input type="text"/>		<input checked="" type="checkbox"/> Use default settings
	Forced Login Number: not available		
	Forced Logout Number: not available		
Max number of waiting calls	<input type="text" value="3"/>		<input checked="" type="checkbox"/> Use default settings
Maximum waiting time (sec.)	<input type="text" value="60"/>		<input checked="" type="checkbox"/> Use default settings

Uncheck "use default settings" to be able to enter the override value.

Note: each default setting can be easily reverted to its default value, a **factory setting**, that is a built in value set during the UC Suite installation.

Administrative menu

Select "Advanced Queuing" in the UC Suite menu. The following options are available:

- **Queues:** allows to create, delete and edit the queues.
- **Default settings:** allows to edit the queue settings which will be inherited by all queues
- **Agent Status:** this is a link to a page that allows managing the login/logout status of the agents on any queue
- **Reports:** link to Advanced Queuing Public queues/agents reports

- **Scheduled reports:** Displays the list of all scheduled Advanced Queuing reports.
- **Manage Service:** to start or stop Advanced Queuing service

Queues configuration

Note: Advanced Queuing reloads settings every 30 seconds. So most Advanced Queuing setting changes apply 30 seconds after they have been saved. For example, after changing a voice prompt, you must wait 30 seconds before callers hear the new one.

Note: all Advanced Queuing settings are explained by a contextual help available as a tooltip window over the "i" icon, beside each control.

1. PBX Configuration

Please, see PBX Configuration for the initial PBX configuration. Be sure that the queue you're going to create is reachable by a route.

2. Creating a queue

Creating a new queue is a very simple task. Select the Queues menu option, the list of existing queues is displayed. Click the "Add new queue" link on top of the list. A popup form window will appear asking to fill the basic queue information:

- **Queue name:** a mnemonic identifier of the queue. This must be unique, that is, two queues cannot have the same name
- **Queue phone number:** the telephone number to be called to enter the queue (DNIS). This must be unique, that is, two queues cannot have the same phone number. Also called **Pilot Number**
- **Type:** the type of the queue. Waiting Queue is the normal waiting queue (Priority-FIFO). The **Camp-On** is used internally to park calls directed to internals which are currently busy. See below.
- **Enabled:** tells the system if the queue is enabled or not. Disabling unnecessary queues may be useful to change the queue settings without the need to stop the service.

Once confirmed the new queue will appear in the queue list. Double click on it or click the "details" icon to edit the queue settings and behaviours.

3. Basic Settings

The basic settings windows allow to edit the information you inserted during creation, plus other parameters:

- **Queue Priority:** this is the priority level value of this queue, in the range 1-10. Higher values will instruct Advanced Queuing to serve this queue calls before the ones in lower priority queues. This value is used only when two or more queues share the same agents and the distribution algorithm has selected the same agent as destination for a call.
- **Login/Logout telephone address:** this is a phone number triggering a very simple voice service that toggles the login status of agents for this queue, switching from login to logout and vice versa. Please notice that this phone number is optional but, **if set, it must be unique**, different from the queue phone number and **reachable by a route in the PBX**. When this number is set, two additional service numbers are automatically defined by the system appending respectively '0' and '1' to the login/logout phone numbers. For example, if login/logout number is 811, such numbers will be 8110 and 8111. These additional numbers can be called by agents to change their login status respectively to logout and login, without the "toggle" mechanism, so they can be used to define two speed dials buttons in the agents phone set to login/logout the queue very easily. If you intend to use these additional numbers (that are 1 digit longer than the login/logout toggle number) be sure they are reachable through a route in the PBX.
- **Max number of waiting calls:** this is the upper limit you can define for the number of waiting calls in the queue. Incoming calls exceeding this limit will trigger the **overflow** scenario and the associated treatment will be applied. Set this value to 0 (zero) to remove any limit.
- **Maximum waiting time:** this is the maximum time interval the calls will wait in queue for an agent. When this time is over, the maximum waiting time scenario will trigger and the associated treatment will be applied. Set this value to 0 (zero) to remove any limit.

Basic Settings

Configure here the basic settings for this queue.

Queue name	<input type="text" value="DEMO-IT"/>		
Telephone address	<input type="text" value="6390"/>		
Queue type	<input type="text" value="Waiting queue"/>		
Enabled	<input checked="" type="checkbox"/>		
Queue priority	<input type="text" value="5"/>		<input checked="" type="checkbox"/> Use default settings
Login/Logout telephone address	<input type="text" value="6389"/>		<input type="checkbox"/> Use default settings
	Forced Login Number: 63891		
	Forced Logout Number: 63890		
Max number of waiting calls	<input type="text" value="0"/>		<input type="checkbox"/> Use default settings
Maximum waiting time (sec.)	<input type="text" value="300"/>		<input type="checkbox"/> Use default settings
			<input type="button" value="Save"/> <input type="button" value="Cancel"/>

Hint: to make a simpler configuration, set the main queue phone number and the login/logout phone number with a constant offset. For example, define three queues with phone numbers 800, 810, 820 and associated login/logout numbers with 801, 811, 821.

4. Configuring Specific scenarios

In the "Behaviours Tuning" section of the queue configuration page, you can define the treatments that will be applied in less common situations/conditions. The following conditions can occur:

- **Queue overflow:** this treatment is applied when the incoming call is exceeding the maximum number of waiting calls (if such value is different from zero). You can just play a message and hang-up or play a message and transfer to any number or SIP address.
- **No available agents:** this treatment will be applied when the incoming call arrives and there are no agents configured or all configured agents are logged out. You can place the call in the waiting queue or just play a message and hang-up or play a message and transfer to any number or SIP address.
- **Returned calls:** this treatment is applied to calls that enter the queue for the second (or more) time, for example because of a no-answer forward by a company extension. You can place the call in the waiting queue or just play a message and hang-up or play a message and transfer to any number or SIP address.
- **Maximum waiting time:** this treatment is applied when the maximum wait time expires (if such timeout is set different from zero). You can just play a message and hang-up or play a message and transfer to any number or SIP address.

Behaviours tuning *

Use this section to set specific treatments of the calls in particular conditions.

On queue overflow	<input type="text" value="Play message and drop"/>		<input type="checkbox"/> Use default settings
On no available agents	<input type="text" value="Enqueue"/>		<input type="checkbox"/> Use default settings
For returned calls	<input type="text" value="Enqueue"/>		<input checked="" type="checkbox"/> Use default settings
On max wait time (sec.)	<input type="text" value="Play message and transfer"/>		<input type="checkbox"/> Use default settings
	<input type="text" value="office@company.com"/>		
			<input type="button" value="Save"/> <input type="button" value="Cancel"/>

5. Time Table

Once selected a queue, the "Time table" tab allows to configure the ordinary weekly time table, with relevant queue behaviours. In this tab administrator can define when the queue is open (business hours), holidays or special events and the related treatments to apply. The combination of default behaviours, ordinary weekly schedule and special events/holidays makes the queue programming really flexible allowing, for example, to provide specific voice prompts or trigger different behaviours in particular hours or days. This tab include five sections, descriptions follow.

Timezone selection

Select the timezone that rules the queue timetable (opening/closure time bands). Please, notice that the daylight saving time shift will automatically apply to the selected timezone.

Queue Settings	Time Table	Voice Messages	Call Distribution	Permissions
<p>Select the time zone to be used for this service. The daylight saving setting for the specified time zone will apply. Please, notice that if you change the time zone the existing schedules (weekly calendar, holidays and special events) will be applied accordingly.</p> <p>Time zone: (UTC-05:00) Eastern Time (US & Canada) <input type="checkbox"/> Use default settings</p> <p>Save Cancel</p>				

Forced Mode

This section allows to force a particular behaviour of the queue, overriding any schedule. This is also known as "Manual Mode", since this forced mode can also be set from Attendant Console, typically to override a schedule programmed by the administrator.

Administrators can program which is the call treatment to apply in the case of **forced open** status and **forced closed** status. They can also use this section to switch the queue to one of the following options:

- Regular queue scheduled
- Forced open
- Forced closed

Default behaviour

This section allows to decide which is the default behaviour of the queue, that is, out of any scheduled time interval and holidays/special events.

Typically a queue is closed by default, but administrator could choose to keep the queue open by default, for example if the queue is managing a 24x7 service.

Ordinary weekly schedule

This section allows to define the business hours of the queue over the week and the treatments to apply.

A calendar with a weekly view displays the actual configuration and edit it very easily.

Right click the mouse over the week calendar view to add a new time interval. Click on the right upper corner of a defined time interval to delete it.

Ordinary weekly schedule- (schedules configured)

Sets here the ordinary weekly opening hours and behaviours of the queue. This schedule can be overridden by holidays and special events defined below in the dedicated section.

Use global settings ☐

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
06:00							
07:00							
08:00	Open	Open	Open	Open	Open	Open	
09:00							
10:00							
11:00							
12:00							
13:00							
14:00							
15:00							
16:00							
17:00							
18:00							

⌵ Show 24 hours

Note: you need to uncheck the "Use global settings" option in order to enable the calendar editing, otherwise the weekly view will display the global settings, that is not editable from this window (you need to configure it in the "Global Settings" left side menu option).

Hint: You can select a time interval in the weekly calendar view, then press the right click button, to select a time range as in the image above.

Once selected the "Add a new schedule" option, a popup window will appear allowing to define the new time interval.

You can choose the starting hour, the ending hour, the days of week the time interval will be valid and the preferred behaviour to apply in such time interval.

Notice that you can program the queue to be closed in the time interval. This may be useful, for instance, if the default behaviour of the queue is set to be open.

Edit

Edit ordinary weekly schedule (referred to (UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna)

From hour

08:30

To hour

18:30

Apply on these days

☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday ☐ Saturday ☐ Sunday

Queue Status

☒ Open ☐ Closed

Voice message

A specific message

English - Welcome

Welcome!

Save

Cancel

Hint: You can define a mix of closure and opening time intervals. The schedule in the following screenshot, for example, uses a closure time interval on Saturday morning only to provide a different closure voice message, respect to the one programmed in



the default behaviour.

Holidays and special events

Use this section to define treatments for holidays and special events that override the ordinary weekly schedule. A grid will display the list of configured events, grouped in two classes of events:

- Common holidays/events: these are holiday and events common to all queues, inherited from global settings. They are displayed in the higher part of the list. Administrators can define common events in the global settings configuration page. This allows to define new holidays/events that apply to all queues very quickly.
- Queue-specific events: these events apply only to the specific queue, they are displayed in the lower part of the list. If needed, you can also use this kind of events to override the common holidays/events.

Sets here specific behaviours of the queue used during holidays or special events. These behaviours override the ordinary weekly schedule defined above. Notice that common holidays and events must be set in the specific configuration page, by an administrator profile.

 Add  Refre

NAME	SCHEDULED ON	QUEUE STATUS	ACTIONS
▼ Type : Common holiday / event			
Christmas Day	25/12/2010 Full day Every year	Closed	Play message: Holiday goodbye Action: Play message and drop
Bank Holiday (150th Italy foundation anniversary)	17/03/2011 Full day	Closed	Play message: Holiday goodbye Action: Play message and



To add a new holiday/event, click the "Add" link. A popup window will appear, asking for the event details (starting date-time, ending date-time, recurrence, **treatment to apply**, voice prompt). Remember to click the Save button to apply changes.

Testing behaviours

In order to understand which treatment will be applied by Advanced Queuing on a specific date-time, a test section is available (named "Test a scheduled behaviour").

Test a scheduled behaviour

Use this test to see which is the scheduled behaviour for this queue on the specified date/time.

Date-time to test:  

06/09/2013 14:50:24

Play message: Welcome message
Action: Queue call
This treatment is weekly schedule for this queue

This is a very simple form that displays the scheduled behaviour for a given date-time, pressing the "Check" button. Pressing the "Check current behaviour" will display the behaviour applied at the current date-time.

Note: this test only considers the scheduled behaviours, not the scenarios that may trigger in particular conditions that arise at run time, not available in advance (for instance: no agents available, overflow, etc).

6. Configuring voice prompts

The "Voice messages" tab allows to define and customize the audio prompt and music provided by the application to callers. A set of pre-installed voice prompts are available in the various supported languages (builtin prompts). All audio messages settings can be inherited by default from the global settings, more over, it's possible to listen at the voice prompts directly from the WEB browser clicking the speaker icon (requires a multimedia-capable PC and a multimedia plugin able to play WAV files).

In order to avoid a voice prompt is played, select the entry "None" in the drop-down selection list.

Administrators can load and manager their own voice messages in a dedicated window, available pressing the "Manage messages" link.

A popup window will allow to upload a new audio file from the client PC in Wav or MP3 formats. If the audio sample rate is not compliant, it will be automatically converted to the required format.

Each audio file is associated to name (identifier) and an optional transcript, useful to describe the content of the voice prompt.

The second section of the popup form (named "Manage audio files") can be used to list and delete the existing audio files.

Manage audio files		
Name	Transcript	
Arabic - Queue Full		
Arabic - Wait Long		
Arabic - Wait Short		
Arabic - Welcome (return)		
AU_IVR-Choose-Theater		
AU_IVR-Choose-Theater_OK		
AU_NP-PO-DE		
AU_NP-PO-EN		

Following, the list of voice prompts that can be edited:

Ordinary voice prompts

- Welcome messages
 - ◆ Ordinary welcome message: played before the call is enqueued, if there is at least one agent logged in the queue.
 - ◆ No-available agents welcome message: played before the call is enqueued, if there are no operators logged in the queue.
- Closure messages
 - ◆ Closure goodbye: played out of the business hours (queue closed).
 - ◆ Holiday goodbye: played by default during the holiday events.
- Wait messages
 - ◆ Wait music: the loop played while the caller is waiting in queue.
 - ◆ Short wait message: this message is played once, while waiting in queue for an available agent. Generally used to provide prompts such as "We apologize for the wait, our operators are still busy". The delay amount triggering this prompt replay can be set in the waiting treatment tuning section of the queue settings.
 - ◆ Long wait message: this message is played periodically after the short wait message, while waiting in queue for an available agent. The recurrence time of this prompt is can be set in the waiting treatment tuning section of the queue settings.
- Additional messages (play queue position): If the option is enabled, after the Welcome message, the ShortWait and the LongWait, Advanced Queuing plays a system message with an indication of the position in the queue. At each position change, Advanced Queuing delivers:
 - ◆ no message if:
 - ◇ the call is at the head of the queue and there is at least one agent available (ready and idle)
 - ◇ or a consultation is in progress with an operator
 - ◆ "You will be the next caller to be served", if the call is at the front of the queue and there are no agents available, nor are consultations with operators
 - ◆ "There are <n> calls waiting to be served before you", in case there are 1 to 9 calls waiting before the involved call;
 - ◆ "There are more than 9 calls waiting to be served before you", in case there are more than 9 calls before the involved call;

NOTE. Note: If a VIP call is queued, it overrides sequence of non-VIP calls in the queue, without affecting queue position voice announcement, which still plays the "best" gained position in the queue (cheat).

Special cases

- Returned calls: this is the optional welcome message provided to calls that enter in queue for the second (or more) time.
- Queue full: this is the goodbye message played before the overflow treatment is applied.
- Max wait time: this is the goodbye message played before the maximum wait time treatment is applied.

Multi-Tenant environments: Voice Prompts Separation

In case of Imagicle Multi-Tenant environments, it is possible to restrict access to customized voice prompts on a tenant basis.

In fact, customized voice prompts can be fully managed (uploaded, configured and deleted) by users who has been given the following Advanced Queuing system permissions:

- Global supervisor;
- Global advanced supervisor;
- Complete management.

Such users can manage Advanced Queuing voice prompts at system level and set them as shared (accessible and available by all Tenants) or set them to a specific Tenant (accessible and available only by the specific tenant they have been assigned to)

A specific user who has been given "queue manager" permission can manage (configure and delete) only voice prompts that are shared across all Tenants and Tenant specific ones.

Hint: set a message prompt to "None" to skip it.

7. Defining the set of agents/targets that will serve the queue

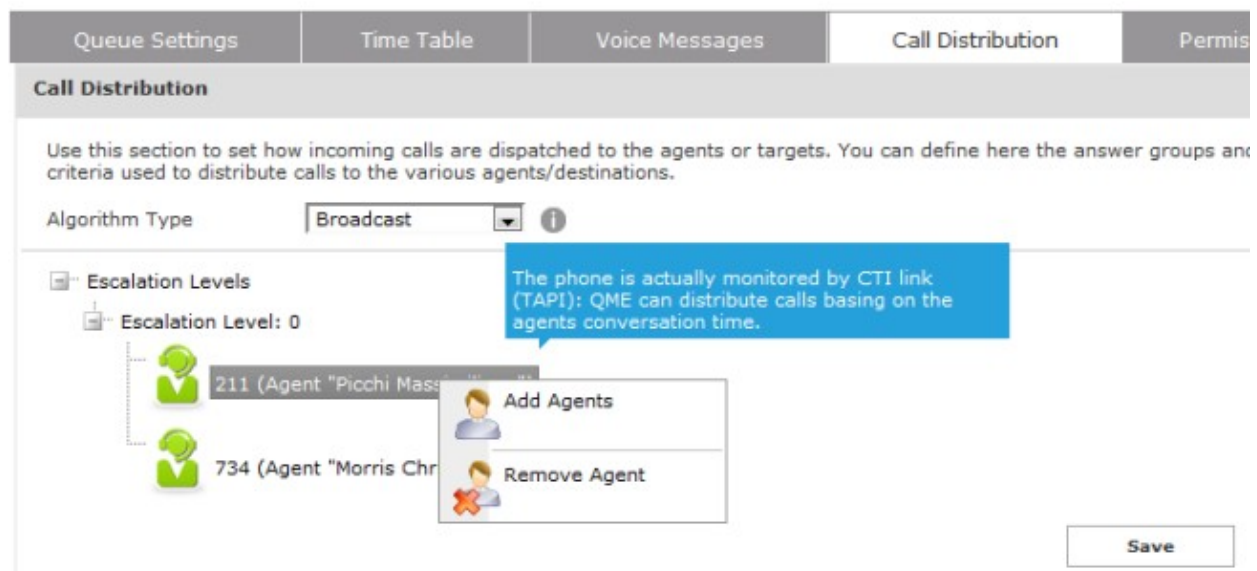
In the "Call distribution" tab administrators can set the agents/targets that will answer the calls of the current queue and the algorithm used by Advanced Queuing to dispatch calls to the available agents. Please, see "Product description and architecture" for a detailed description of available algorithms, sub-selection policies and escalation levels.

Configured agents are represented in a treeview, grouped in escalation levels:

- Agents are displayed with an agent icon, green-colored if the associated phone number is actually monitored by CTI (TAPI).
- Simple destinations are displayed with a phone set icon.

Note: you need to save the agents list, to properly display CTI indication (green/grey agent icon).

DEMO2-IT (6395) - (waiting queue)



A right click will activate a menu to add/delete escalation levels (groups) and single agents. When you select the "Add agent" option, a popup window will let you to insert a new target.

Such popup window has two sections:

- **Agent:** allows to add an agent searching him/her in the IAS users list. Search can be done by name, department or extension.
- **Simple number:** allows to add a new target just inserting the destination phone number or SIP URI address (and a short description for it).

Add a destination phone number not associated to a Queue Manager agent. Login/logout is not supported for this kind of targets, only the telephony status (idle/busy) is evaluated by distribution algorithms. It can be used, for example, to distribue calls to a PBX hunt-group, to a voice mail, to an external phone number.

Simple destination number

510

Target description

Support Hunt Pilot

Add

Cancel

Advanced Settings

Advanced settings for Call Distribution include some parameters that should be changed carefully, because they impact on the call dispatching mechanism and its effectiveness. Such parameters are:

- **Call Transfer Type:** this sets the type of call transfer from Advanced Queuing to targets. Basically it's possible to decide if enabling the supervised transfer (with consultation, this is the recommended option) or the blind transfer.
- **No Answer Timeout:** the maximum duration (in seconds) of the consultation transfer to agents. When this time value has been exceeded, QME retrieve the call in queue and try to engage the next agent. This value is not considered if the call transfer type is "blind".
- **Automatically logout agents on no-answer:** if the consultation to an agent call times out and this flag is enabled, the agent is automatically logged out from the current queue.
- **Automatically logout agents with unreachable phones:** Automatically logout agents with unreachable phone device (e.g. Jabber/Webex client not running);
- **Transfer attempts every:** this value (in seconds) rules the frequency of consultation calls to agents/targets in the case the target is not CTI-monitored. Please, change this value only if suggested by Imagicle support team.
- **Ignore agents telephony status:** Advanced Queuing engages a consultation call to agent, regardless own phone status.
- **Max consultation calls per agent:** Maximum number of queued calls offered to an agent;
- **Caller name string:** use this setting to compose the caller name string of the consultation call from Advanced Queuing to agents. Such name can be constant or composed dynamically, using a set of variables indicated by the tooltip, in the web page. Some of such variables are related to the Speedy Enterprise contacts (for instance the company name) and are blank if Contact Manager is not licensed. This value is not considered if the call transfer type is "blind".
- **Caller number:** use this setting to compose the caller number of the consultation call from QME to agents. It can be constant or dynamically set using the original caller number (variable `$$CALLERNUMBER$$`). This value is not considered if the call transfer type is set to "blind".
- **After call work - Wrap-up time (sec.):** This is the comfort interval, in seconds, assigned to agent after every served call. During Wrap-up time, calls are distributed to other agents.

8. Configuring user permissions for the Queue

Once you have added agents to the queue, you may change their permissions. Open the Queue settings, Click on **Permissions**.

Here you can set the permissions for the agents. For a detailed descriptions of the available roles, please see **User permissions** at the beginning of this section.

In the lower part you can assign a role to users who are not agents. This allows, for example, to define Queue supervisors or observers who do not begin to queue distributions lists. The first step is to choose an UC Suite user by clicking on the "add user link". Select one or more users and the permission level you need. You can edit the Permissions later through the list in the main User's permissions page.

The Camp-On queue

The camp-on queue allows to directly transfer a call towards an internal number. If the number is busy, Advanced Queuing will keep the call waiting, and the caller will hear music on hold. When the destination number becomes available, the call is

automatically transferred to that number.

The call is kept on the camp-on queue:

- Until the maximum waiting time is reached
- Until an agent manually retrieves the call
- Until the destination number becomes available

Agents using Attendant Console may use the camp-on queue through a simple graphic interface. Agents who do not have Attendant console may park the calls by dialing:

`<Camp-on-prefix><destination number>`

E.g. `*1001`

You enter the camp-on prefix in the Queue Phone number field in the queue basic settings.

One camp-on queue is built in. Usually there is no need to have more than one camp-on queue.

Should you need another camp-on queue, you may only edit: Queue Basic settings, Call Distribution advanced settings, a subset of the Voice Messages and the Queue Permissions.

The maximum number of call that can be parked on all camp-on queues is the number of licensed channels doubled. E.g. if you bought a 8 channels license, you'll have a free additional 16 camp-on channels.