

# Mida eFramework

---

## Mida LiteCallCenter Configuration Guide

Mida Solutions

Document Version: 1.0



## Table of Contents

1.	Introduction.....	4
1.1	Legal Statements .....	4
1.2	Preface.....	4
1.3	Audience.....	4
1.4	Notations .....	5
1.5	References .....	5
2.	Architectural Overview.....	6
3.	Preliminary settings .....	<b>Errore. Il segnalibro non è definito.</b>
3.1	License request.....	31
4.	Mida LiteCallCenter configurations.....	7
4.1	Creating/editing users and adding extensions .....	7
4.1.1	Import more users at once .....	8
4.2	Audio configuration.....	9
4.3	Create/edit services.....	10
4.3.1	Main parameters .....	10
4.3.2	In-service treatment.....	11
4.3.2.1	Advanced Queue Manager – Supervisors and Agents configuration.....	20
4.3.3	Out Of Service Treatment.....	21
4.3.4	Holiday.....	22
4.4	Supervisors .....	24
5.	Recorder configuration.....	25
5.1	Sniffer recorder configuration.....	25
5.2	Playback station.....	26
5.2.1	Recording archive .....	26
5.2.2	Call Scenario .....	29
5.2.3	Convert native or encrypted audio files.....	30
5.3	Recording export (only for supervisors and administrators) .....	30

# 1. Introduction

## 1.1 Legal Statements

THE SPECIFICATION AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

ACCESS TO THE SOFTWARE REQUIRES PURCHASE OF A VALID LICENSE. Mida Solutions OFFERS SUPPORT AND SOFTWARE BUG FIXES IF THE CUSTOMER IS UNDER A VALID SUPPORT AND MAINTENANCE CONTRACT. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR VENDOR REPRESENTATIVE FOR FURTHER INFORMATION.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. Mida Solutions DISCLAIMS ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE.

IN NO EVENT SHALL Mida Solutions OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF Mida Solutions OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

All trademarks mentioned in this document are the property of their respective owners.

Any Internet Protocol (IP) address and phone/fax number used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output network topology diagrams and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Mida eFramework  
© 2010 Mida Solutions, All rights reserved.

Mida LiteCallCenter  
© 2010 Mida Solutions, All rights reserved.

## 1.2 Preface

This document is part of the official documentation of Mida Solutions products and details functionalities, user interface, option and working modes in detail. The system allows the user to configure all system functions using a simple and intuitive WEB interface. Please refer to the reference table for a complete list of documents relevant for system configuration.

## 1.3 Audience

The present document addresses both end users and system administrators of the products.

## 1.4 Notations



This document highlights, where possible, the main parameters and operations through **bold** or *italics* text and all parts that might be critical during system configuration or use. Critical parts are also marked with Warning symbol reported here on the left.

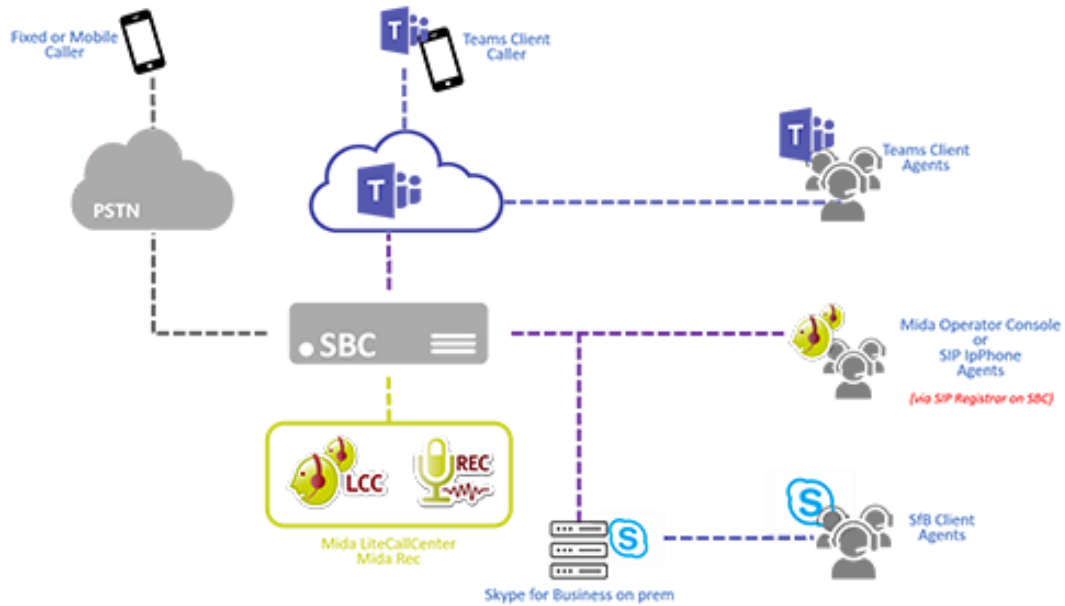
## 1.5 References

This manual includes references to the following list of documents:

- [1] Mida\_Unified\_Portal-Administration\_&\_User\_Manual
- [2] [www.midasolutions.com/browsercompatibility](http://www.midasolutions.com/browsercompatibility)

## 2. Architectural Overview

### Mida LiteCallCenter – All available deployments



### 3.Mida LiteCallCenter configurations

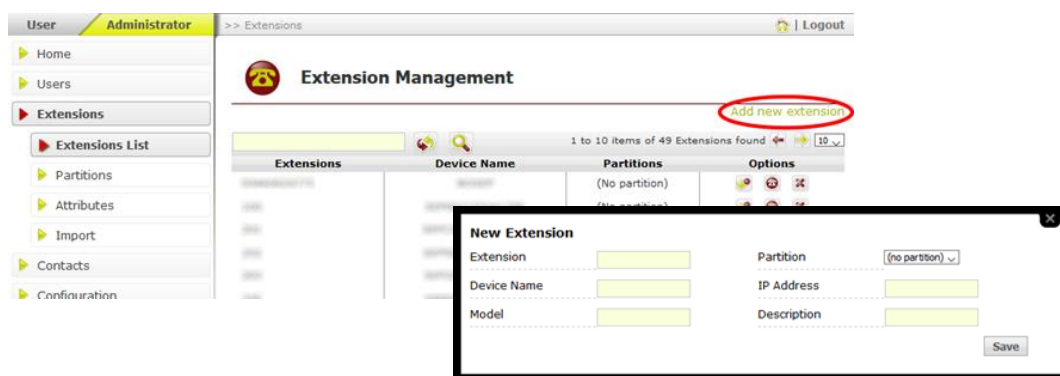
#### 3.1 Creating/editing users and adding extensions

To create a new user, follow the next steps:

**A. Create a new extension:**

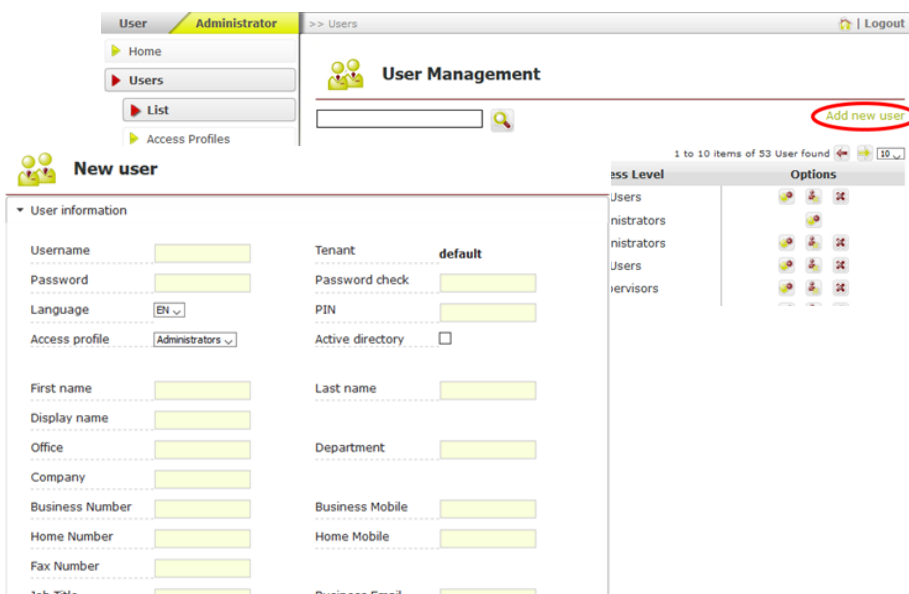
- I. Access the **Extensions management** page going to **Extensions > Extension list** from the navigation menu on the left.
- II. Click on **Add new extension** and fill in the required details:
  - Extension:** it is the extension as configured in the PBX
  - Device Name:** insert the desired name
  - IP address:** insert the IP of the PBX where the extension is already registered
  - Model:** insert as preferred
  - Description:** insert the desired description

Click on **Save** when finished.



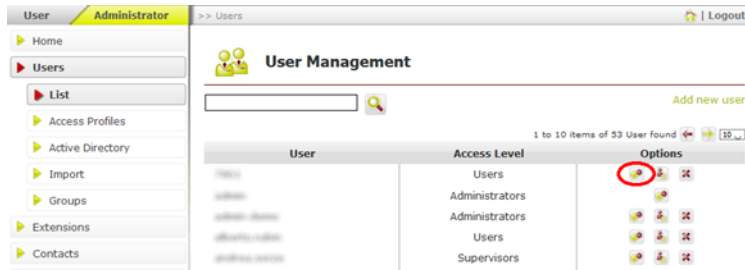
**B. Create a new user:**

- I. Access the **User Management** page, going to **Users > List** in the navigation menu.
- II. Click on **Add New User** and insert the required user's information.

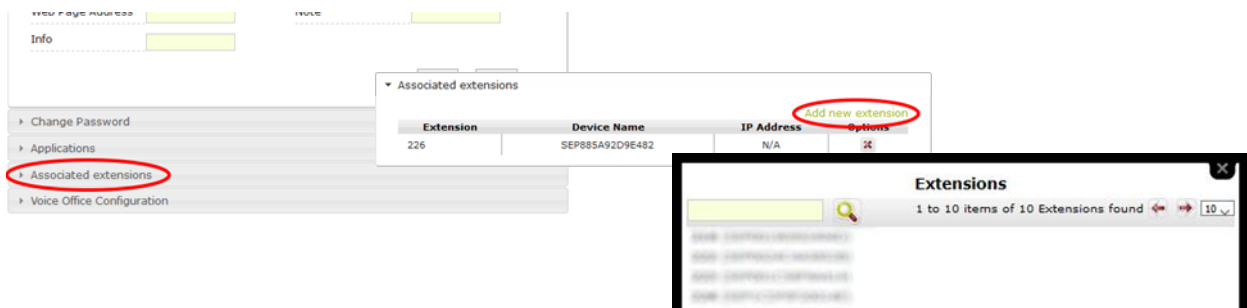


### C. Associate the extension to the new user.

- I. Back in the **User Management** page, click on the **User edit** button, to associate an extension to the user.



- II. Click on the **Associated extensions** tab and then on **Add new extension** to associate the desired extension to the user. Click **Save** when finished.



### 3.1.1 Import more users at once

Once the first user is correctly created (following the previous instructions), it is possible to import all the desired contacts at once:

- I. Go to **Users > Import** in the navigation menu;
- II. Click on the **Download** button in the **Export** section to export the existing user configuration (exported as .csv file in the platform directory).



**Please check the exported users' access level is set to users to download only user information, otherwise the new users may be created with different access levels.**

- III. Modify the downloaded file respecting the existing labels (the first contact will work as guide).



**Save it as .csv;**

- IV. Back in the **Import users** page, use the **Browse** function to upload your updated file to the system. Once found, click on **Upload**.
- V. The system will automatically upload all the list, configuring the new users in the directory and assigning them the extensions inserted in the csv file (new extensions will be automatically created).



### 3.2 Audio configuration

The Mida LiteCallCenter can give a set of greetings (e.g. welcome, IVR menu, out of service...) depending on the specific service configuration.

All audio files have to be uploaded previously using this page.

A list of supported audio formats is available at [2].

Audio file				Upload audio file
File name	Notes	Services	Options	
e_Welcome.wav	welcome EN	1		
e_ShortWait.wav	short wait EN	1		
e_LongWait.wav	long wait EN	2		
e_Retry.wav	retry EN	2		
e_OOS.wav	oos EN	5		

For each audio file, the page provides the following information:

- File Name: is the real name of the uploaded file (e.g. Welcome.wav)
- Notes: can be used to insert a brief note on the file
- Services: number of services using the media

- Options: available options are:

	<b>Details:</b> show additional details on the selected media.
	<b>Download:</b> download the file locally.
	<b>Delete.</b> A warning dialog box will pop-up for confirmation.

Audio file				Upload audio file
File name	Notes	Services	Options	
e_Welcome.wav	welcome EN	1		
e_ShortWait.wav	short wait EN	1		
e_LongWait.wav	long wait EN	2		

Service	Number	Treatment
London	2	Queue manager advanced
Mida	3	Queue manager advanced

To add new audio files, click on **Upload audio file** on the top right (see previous images): a dialog box will pop-up to upload the new file.


Upload audio file

Add File

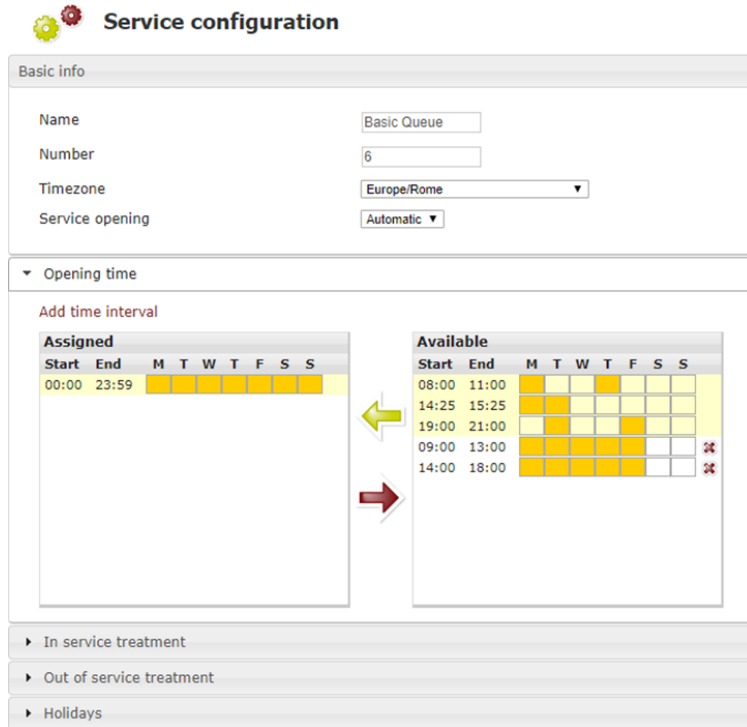
File:  No file chosen

Notes:

### 3.3 Create/edit services

To create new services, click on **Add Service**, on the upper right corner in the Service page. This interface is reached even when editing existing services (clicking on ).

#### 3.3.1 Main parameters



**Service configuration**

**Basic info**

Name: Basic Queue  
 Number: 6  
 Timezone: Europe/Rome  
 Service opening: Automatic

**Opening time**

Add time interval

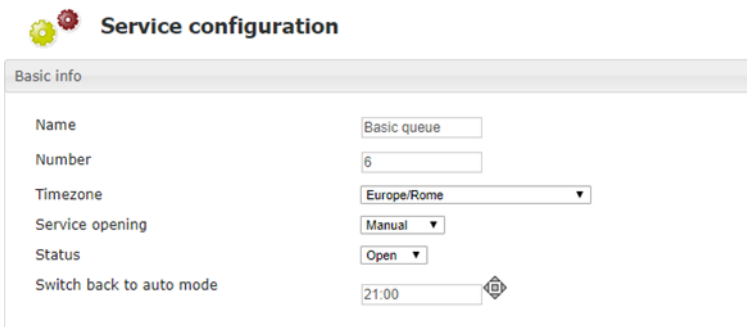
Assigned								
Start	End	M	T	W	T	F	S	S
00:00	23:59							

Available								
Start	End	M	T	W	T	F	S	S
08:00	11:00							
14:25	15:25							
19:00	21:00							
09:00	13:00							✘
14:00	18:00							✘

▶ In service treatment  
 ▶ Out of service treatment  
 ▶ Holidays

The **Service configuration** section allows to set the basic parameters:

- **Name:** set the desired service name;
- **Number:** set the service internal extension number (to be set accordingly with the SBC dial plan);
- **Timezone:** set the timezone related to this particular queueing service.
- **Service Opening:**
  - Automatic: the service will automatically be opened/closed by the system (see section Opening Time for further details on opening time configuration)
  - Manual: service opening/closing has to be manually set by system administrators/supervisors through the web portal; in this case two other parameters have to be set:
    - *Status:* is used to set the service status (open/close)
    - *Switch back to auto mode:* set a time after which the service is reverted to automatic mode



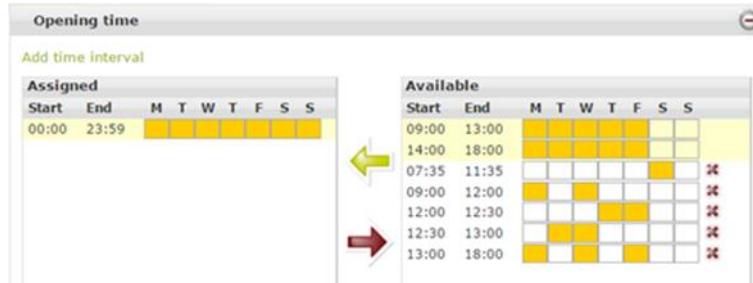
**Service configuration**

**Basic info**

Name: Basic queue  
 Number: 6  
 Timezone: Europe/Rome  
 Service opening: Manual  
 Status: Open  
 Switch back to auto mode: 21:00

**Opening Time**

The opening time used by services in Automatic mode can be configured in this section. The use is similar to the **Opening time** tab available on the common default configuration area.



**3.3.2 In-service treatment**

The **In-service treatment** tab allows to configure the desired call treatment during the service opening hours.

The available treatments are:

- **Hangup**: simply hang up calls incoming to services with this treatment;
- **Transfer**: transfer incoming calls to a different number after providing the desired audio message;
- **Smart Call Routing**: forward the call to a different number;
- **Play message**: provide the desired audio message and then hang up the call;
- **Phono repeater**: provide the desired audio message and number (i.e. to inform caller about a different number to be called);
- **Queue manager**: basic queueing system, without agent management (no skill management, selective login/logout, ...) and queue supervisors;
- **Queue manager advanced**: advanced queueing service, with agent management, queue supervisors, BLF monitoring, selective login/logout and more;
- **Queue manager presence driven**: same functionalities of the **Queue manager advanced**, with presence driven call distribution;
- **IVR**: completely customizable interactive voice response system, with DTMF tone detection.
- **Go to service**: incoming calls are forwarded to another service.

**Transfer**

Forward calls to a different number after welcoming them with the desired audio message.

Configurable parameters are:

- **Transfer to**: insert the destination number (e.g. internal extensions, hunt pilots or outbound numbers...)
- **Message**: from the drop-down list, select the appropriate media available (to add new audio file refer to section 2.3)



### **Smart Call Routing**

This functionality allows to substitute the desired digits of the service number (starting from the left and prefix excluded), in order to forward the call to a different number.

Simply set in **Replace service number with** the digits to be used.

To reproduce a message before forwarding the call, select it from the **Message** drop-down menu.

The screenshot shows the 'In service treatment' window with the following settings:

- Treatment: Smart call routing
- Replace service number with: (empty text box)
- Message: No message

### **Play message**

Choosing the **Play message** option, the system welcomes the incoming calls with the configured message then hangs it up

Simply select the desired audio file from the **Message** drop-down menu (to add new audio file see section **Errore. L'origine riferimento non è stata trovata.**).

The screenshot shows the 'In service treatment' window with the following settings:

- Treatment: Play message
- Message: e\_cust1.wav (msg1 EN)

### **Phono repeater**

Provides the desired audio message followed by the vocalization of the number in the **Play number** textbox (treatment useful for number change cases)

Configurable parameters are:

- **Message:** select the desired media from the drop-down list (to add new audio file refer to section 2.3)
- **Play number:** the dynamic number vocalized by the system
- **Number of replays:** the number of times the system replays the message and number

The screenshot shows the 'In service treatment' window with the following settings:

- Treatment: Phono repeater
- Message: e\_cust2.wav (msg2 EN)
- Play number: 049760185
- Number of replays: 2

## **Queue Manager**

Set up a basic queuing system, without agent management (no skill management, selective login/logout, ...) and queue supervisors.

Calls are forwarded to several **Destination Phone Numbers** (see figure below).

The screenshot shows the 'In service treatment' configuration window. The settings are as follows:

Treatment	Queue manager	
Max number of waiting calls	0	(0 = no limits)
Max waiting time (s)	60	(0 = no limits)
On queue overflow	Hangup	
Give short waiting prompt after (s)	30	
Give long waiting prompt every (s)	60	
Give position (after long wait message)	<input type="checkbox"/>	
Attempt no answer timeout (s)	15	
Call distribution type	Round robin	
Breakout option	<input type="checkbox"/>	
Music on hold	Default value	
Welcome message	e_Welcome.wav	
Short wait message	e_ShortWait.wav	
Long wait message	e_LongWait.wav	
Overflow message	e_Retry.wav	
Breakout message	e_Retry.wav	
Queue announcement message	No message	
Destination phone numbers	<input type="text"/>	Add destination

Configurable parameters are:

- **Max number of waiting calls:** when this condition is exceeded, the system enter the queue-overflow condition. If 0, no limit is set;
- **Max waiting time:** max waiting time in seconds. Exceeding this limit triggers overflow condition;
- **On queue overflow:** on overflow conditions, it is possible to:
  - *hang-up*
  - *forward to another extension* (to be specified in **On queue overflow – Transfer to**)
- **Give short waiting prompt after (s):** waiting time before short waiting message is provided (Timeframe for Waiting Messages);
- **Give long waiting prompt every (s):** period in seconds for the cyclic long waiting message (Timeframe for Waiting Messages);
- **Give position (after long wait message):** it is possible to enable this function to inform caller on the queue position after the long wait message;
- **Attempt no answer timeout (s):** specify parameters for no answer timeout
- **Call distribution type:** dispatching rules for incoming call. Available options are:
  - *Round-robin:* the system calls the number in the list in round-robin mode until the answer of one of destinations; the next call, the system starts trying from the destination next to the last that answered, and so on... (based on ringing time)
  - *Broadcast:* all destinations ring simultaneously, the first to answer takes the call
  - *Linear:* contacts the destination number that answered longer time ago
  - *Top-Down:* always from the first to the last of the list
- **Breakout option:** enabling this option, callers will be able to exit the queue digiting the dedicated code (to be inserted in the **Breakout DTMF code** textbox). It is possible to configure even how the system should behave in breakout situations (select between *Hangup* or *Transfer* from the **Breakout action** menu).

Greetings configurations (for adding new audio files refer to section 3.2):

- **Music on hold:** leave default value or select the appropriate media available from drop-down list
- **Welcome message:** select the appropriate media available from drop-down list
- **Short wait message:** select the appropriate media available from drop-down list
- **Long wait message:** select the appropriate media available from drop-down list
- **Overflow message:** select the appropriate media available from drop-down list
- **Breakout message:** select the message to be played in breakout cases (if breakout option is enabled)
- **Queue announcement message:** select this message to inform agents from which queue the incoming call comes.



**NOTE: when a call approaches the queuing system, audio message are provided in this order:**

**Welcome > ♪ > Short Wait > ♪ > Long Wait > ♪ > Long Wait > ♪ ... > OPERATOR**

- **Destination phone number:** insert the list of extensions use by the system to forwards the incoming calls.

**Queue Manager Advanced**

The **Queue Manager Advanced** provides functions similar to the basic **Queue Manager**, with advanced features like agent availability management (login/logout) through XML service, web interface or operator console.

**In service treatment**

Treatment	Queue manager advanced ▾	
Max number of waiting calls	0	(0 = no limits)
Max waiting time (s)	60	(0 = no limits)
On queue overflow	Transfer ▾	
On queue overflow - Transfer to	<input style="width: 100%;" type="text"/>	
On no available agents	Transfer ▾	
On no available agents - Transfer to	<input style="width: 100%;" type="text"/>	
Give short waiting prompt after (s)	30	
Give long waiting prompt every (s)	60	
Give position (after long wait message)	<input type="checkbox"/>	
Attempt no answer timeout (s)	15	
Call distribution type	Round robin ▾	
Breakout option	<input checked="" type="checkbox"/>	
Breakout DTMF code	<input style="width: 100%;" type="text"/>	
Breakout action	Hangup ▾	
Ready/Not Ready	Default ▾	
Music on hold	Default value ▾	
Welcome message	e_Welcome.wav ▾	
Short wait message	e_ShortWait.wav ▾	
Long wait message	e_LongWait.wav ▾	
Overflow message	e_Retry.wav ▾	
No available agents message	e_Retry.wav ▾	
Breakout message	No message ▾	
Queue announcement message	No message ▾	

Configurable parameters are:

- **Max number of waiting calls:** when this condition is exceeded, the system enter the queue-overflow condition. If 0, no limit is set;
- **Max waiting time:** max waiting time in seconds. Exceeding this limit triggers overflow condition;
- **On queue overflow:** on overflow conditions, it is possible to:
  - hang-up
  - forward to another extension (to be specified in **On queue overflow – Transfer to**)
- **On no available agents:** on no available agents situations, it is possible to:
  - hang-up
  - forward to another extension (to be specified in **On no available agents – Transfer to**)
  - keep waiting
  - go to out of service treatment
- **Give short waiting prompt after (s):** waiting time before short waiting message is provided (Timeframe for Waiting Messages)
- **Give long waiting prompt every (s):** period in seconds for the cyclic long waiting message (Timeframe for Waiting Messages)
- **Give position (after long wait message):** it is possible to enable this function to inform caller on the queue position after the long wait message;
- **Attempt no answer timeout (s):** specify parameters for no answer timeout
- **Call distribution type:** dispatching rules for incoming call. Available options are:
  - Round-robin: the system calls the number in the list in round-robin mode until the answer of one of destinations; the next call, the system starts trying from the destination next to the last that answered, and so on... (based on ringing time)
  - Broadcast: all destinations ring simultaneously, the first to answer takes the call
  - Skill-based: contact agents with higher skills first
  - Idle: contact agents that have been available for longer time first; the availability is calculated from the disconnection of the last served call (based on disconnect time)
  - Top-Down: always from the first to the last of the list (the order is set by the skills)
- **Breakout option:** enabling this option, callers will be able to exit the queue digiting the dedicated code (to be inserted in the **Breakout DTMF code** textbox). It is possible to configure even how the system should behave in breakout situations (select between *Hangup* or *Transfer* from the **Breakout action** menu).
- **Ready/Not Ready:** if enabled, the **Ready/Not Ready** feature allows agents to change their status in case they are to leave the console for a moment, without completely logging out from the queues. Operative status is **Ready**; in **Not Ready**, users are not considered as completely logged out from the service/s, but the system will not forward them queue calls.

*Greetings configurations* (for adding new audio files refer to section 3.2):

- **Music on hold:** leave default value or select the appropriate media available from drop-down list
- **Welcome message:** select the appropriate media available from drop-down list
- **Short wait message:** select the appropriate media available from drop-down list
- **Long wait message:** select the appropriate media available from drop-down list
- **Overflow message:** select the appropriate media available from drop-down list
- **No available agents message:** select the message to be played on no available agents situations;
- **Breakout message:** select the message to be played in breakout cases (if breakout option is enabled)
- **Queue announcement message:** select this message to inform agents from which queue the incoming call comes.



**NOTE: when a call approaches the queuing system, audio messages are provided in this order:**

**Welcome > ♪ > Short Wait > ♪ > Long Wait > ♪ > Long Wait > ♪ ... > OPERATOR**

### **Queue Manager presence driven**

Very similar to the **Queue Manager Advanced**, the **Queue Manager presence driven** monitors agents' presence status instead of the BLF status.

Parameter	Value	Notes
Treatment	Queue Manager presence driven	
Max number of waiting calls	0	(0 = no limits)
Max waiting time (s)	60	(0 = no limits)
On queue overflow	Transfer	
On queue overflow - Transfer to		
On no available agents	Transfer	
On no available agents - Transfer to		
Give short waiting prompt after (s)	30	
Give long waiting prompt every (s)	60	
Give position (after long wait message)	<input type="checkbox"/>	
Attempt no answer timeout (s)	15	
Breakout option	<input type="checkbox"/>	
Ready/Not Ready	Default	
Music on hold	Default value	
Welcome message	e_Welcome.wav	
Short wait message	e_ShortWait.wav	
Long wait message	e_LongWait.wav	
Overflow message	e_Retry.wav	
Breakout message	e_Retry.wav	
Queue announcement message	No message	

Configurable parameters are:

- **Max number of waiting calls:** when this condition is exceeded, the system enter the queue-overflow condition. If 0, no limit is set;
- **Max waiting time:** max waiting time in seconds. Exceeding this limit triggers overflow condition;
- **On queue overflow:** on overflow conditions, it is possible to:
  - hang-up
  - forward to another extension (to be specified in **On queue overflow – Transfer to**)
- **On no available agents:** on no available agent situations, it is possible to:
  - hang-up
  - forward to another extension (to be specified in **On no available agents – Transfer to**)
  - keep waiting
  - go to out of service treatment
- **Give short waiting prompt after (s):** waiting time before short waiting message is provided (Timeframe for Waiting Messages)
- **Give long waiting prompt every (s):** period in seconds for the cyclic long waiting message (Timeframe for Waiting Messages)
- **Give position (after long wait message):** it is possible to enable this function to inform caller on the queue position after the long wait message;
- **Attempt no answer timeout (s):** specify parameters for no answer timeout
- **Breakout option:** enabling this option, callers will be able to exit the queue digiting the dedicated code (to be inserted in the **Breakout DTMF code** textbox). It is possible to configure even how



the system should behave in breakout situations (select between *Hangup* or *Transfer* from the **Breakout action** menu).

- **Ready/Not Ready:** if enabled, the **Ready/Not Ready** feature allows agents to change their status in case they are to leave the console for a moment, without completely logging out from the queues. Operative status is **Ready**; in **Not Ready**, users are not considered as completely logged out from the service/s, but the system will not forward them queue calls.

*Greetings configurations* (for adding new audio files refer to section 3.2):

- **Music on hold:** leave default value or select the appropriate media available from drop-down list
- **Welcome message:** select the appropriate media available from drop-down list
- **Short wait message:** select the appropriate media available from drop-down list
- **Long wait message:** select the appropriate media available from drop-down list
- **Overflow message:** select the appropriate media available from drop-down list
- **Breakout message:** select the message to be played in breakout cases (if breakout option is enabled)
- **Queue announcement message:** select this message to inform agents from which queue the incoming call comes.



**NOTE: when a call approaches the queuing system, audio message are provided in this order:**

**Welcome > ♪ > Short Wait > ♪ > Long Wait > ♪ > Long Wait > ♪ ... > OPERATOR**

### V.I.P. contacts

It is possible to configure contacts as **V.I.P.**

These contacts are managed as privileged, as any incoming call done by a number assigned to a V.I.P. contact is put in front of the queue (bypassing FIFO order).

To configure **V.I.P. contacts** go to **Contacts > Home**, search the desired contact and flag the **VIP** option

### **IVR**

Automatically handle calls with voice and DTMF tone detection. The IVR system can reply with pre-recorded or dynamically generated audio messages.

Below, the main steps to configure a new IVR service:

- Select **IVR** as treatment (and optionally a welcome message); then save the configuration.

The screenshot shows a window titled "In service treatment". Inside, there are two dropdown menus. The first is labeled "Treatment" and has "IVR" selected. The second is labeled "Welcome message" and has "e\_ivr\_welcome.wav (ivr welcome EN)" selected. Below the dropdowns, there is a text message: "Saving and updating IVR menus will be possible only after saving the service."

- b) Click on **Manage menu and options**

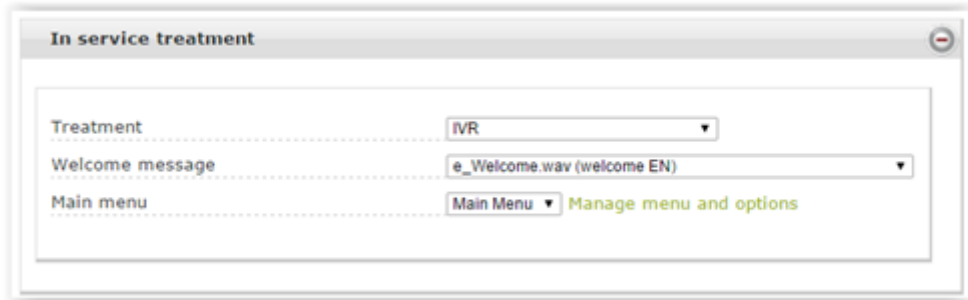
- c) Create a new menu clicking on **Add menu** (or select an existing one)

- d) Configure menu options

- e) Once all the options are configured, click the **Save** button

Option number	Action	Options
On no selection	Play message	
1	Transfer	

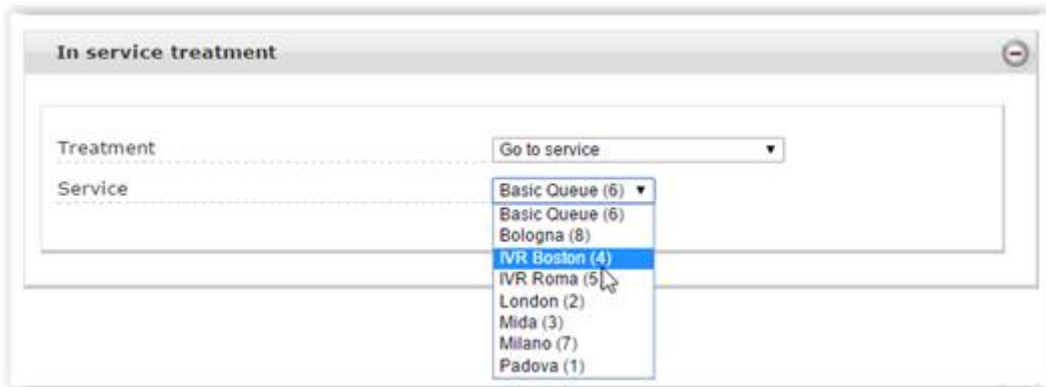
- f) Go back to the main page, select the new menu (*Main Menu*) from the drop-down list and save the configuration.



**Go to Service**

Choosing the **Go to Service** option, the system forwards the incoming calls to another configured voice service.

*NOTE: this treatment may be useful to simply configure where there is the need to give the same "in service" treatment to more than one service but differentiate the opening time and out of service treatment.*



### 3.3.2.1 Advanced Queue Manager – Supervisors and Agents configuration

Using the **Agents configuration** section (in the navigation bar), it is possible to link one or more agents to a queue, assigning them a specific skill level (needed for the **Queue Manager Advanced** treatment).

State	Name	Number	Supervisors	Agents	Agents logged	Options
	London	2	0	1	1	
	New York	3	1	1	1	
	Padova	1	1	2	1	

The page lists only the Advanced Queue Manager Voice Services and for each voice service the following information is provided:

- **State**: show a green or red bullet depending on the voice service status (green=in service time; red= out of service time)
- **Name**: label identifying the voice service
- **Number**: it is the voice service internal extension number
- **Supervisor**: number of supervisor users associated to the service queue
- **Agents**: number of agents/operator configured for the service queue
- **Agents Logged**: number of agents logged in for the voice service
- **Options**:



**Details**: open a section with the details on the agents and the supervisor configured



**Add Agents**: open a dialog box for new agents' configuration

#### Queue Details

Name	Number	State	Supervisor	Agent	Skill	Options
demo1	4301				0	
demo2	4302				0	
demo3	4000				0	

Figure 1: Voice Services: Agents&Supervisor – Queue Details

This section shows the list of users related to the queue as agents and/or supervisors, providing for each user the following information:

- **Name**: agent's username
- **Number**: extension number related to the user
- **State**: red lamp means logout, green lamp means login (also a tooltip is available)

### 3.3.3 Out Of Service Treatment

This tab allows to configure the default Out-Of-Service (OOS) treatment (see 3.3.2).

Available options are:

- **Hang-up:** drop the call without any message (see 3.3.2).

- **Transfer:** transfer the call to a specific destination number; a message may be optionally set choosing it from preloaded media and the system will play it before transfer (see 3.3.2).

- **Smart Call Routing:** working accordingly with what configured in the **Smart Call Routing Configuration** section, this functionality allows to substitute the desired digits of the service number (starting from the left and prefix excluded), in order to forward the call to a different number. Simply set in *Replace service number with* the digits to be used (in the **Smart Call Routing Configuration**, set the number of digits to be changed).

- **Play message** (and then hang-up): it is possible to play a message, selecting it from the dropdown list (see 3.3.2).

- **Phono repeater:** to transfer the call to the phono repeater service (it is possible to configure the specific message and phone number to play (see 3.3.2)).

▼ Out of service treatment

Treatment ..... Phono repeater ▼

Message ..... No message ▼

Play number .....

Number of replays .....

- **Go to Service:** transfer call to another Voice Service (see 3.3.2).

▼ Out of service treatment

Treatment ..... Go to service ▼

Service ..... Coda1 (2000) ▼

### 3.3.4 Holiday

From the **Holiday** section, it is possible to configure the desired behavior during vacancies and/or “not-working” days.

▼ Holidays

[Add service holiday](#)

Notes	Starting day	Ending day	Year	Treatment	Options
Christmas	25/12	25/12	Every year	Play message	

To add new holidays, use the **Add service holiday** link available on the top left corner; this action link opens the new/edit page.

Description .....

Date .....  Any year

Extend period .....

Treatment ..... Play message ▼

Message ..... e\_OOS.wav ▼

For each holiday, it is possible to configure:

- **Description:** insert here the desired name to quickly identify the holiday (e.g. Christmas, Easter, summer closure...)
- **Date:** insert the date of the holiday
- **Any year:** flag this checkbox if it is a recurring holiday (e.g. Christmas)
- **Extended period:** flag this checkbox to set a holiday period (not a single day, e.g. summer company closure); this action enables to set two dates:
  - **Starting day:** the first holiday day
  - **Ending day:** the last holiday day

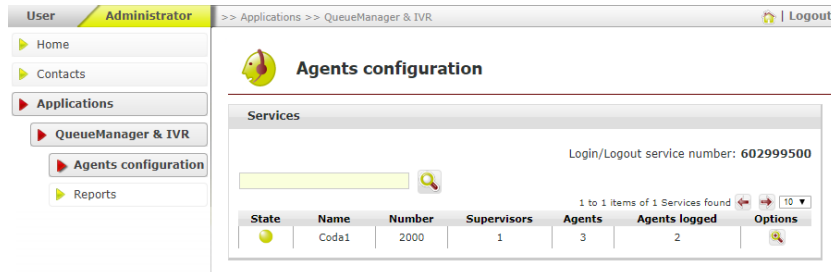
- **Treatment:** choose how the system should behave during holidays. The available treatments are the same of the Out of service hours (Hangup, Transfer, Smart Call Routing, Play a message, Phono Repeater, Go to service); see section 2.2.2 for further details.

Description	<input type="text"/>
Starting day	<input type="text"/>
Extend period	<input checked="" type="checkbox"/>
Ending day	<input type="text"/>
Treatment	<input type="text" value="Play message"/>
Message	<input type="text" value="e_OOS.wav"/>
<input type="button" value="Save"/>	

### 3.4 Supervisors

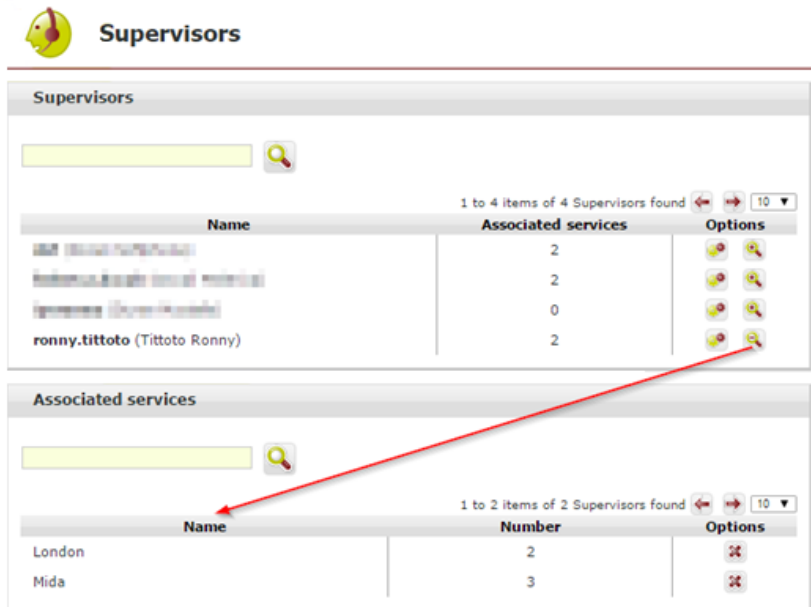
**Supervisor** users have the following rights:

- Access to historical statistics
- Manage the manual open/close service
- View the agent list and force their login/logout (only for Advanced Queue Manager services)



Users with supervisor access profile are listed in the **Supervisors** page that can be opened from the navigation bar on the left (administrators can access it going to **Applications > QueueManager & IVR > Supervisors**).

For each supervisor, it is possible to see the number of related services and, clicking on the **Details** button, their name and the **Delete** option (to remove related services). Acting on the **Add service** button, it is possible to relate new services to the supervisor.





## 4. Recorder configuration

### 4.1 Sniffer recorder configuration

It is possible to configure Mida LiteCallCenter to record calls in sniffer mode. In this case, the system will record all calls (using a configured mirror port) without providing any audio prompt nor asking users for authentications.

To configure Mida LiteCallCenter recorder module, go to **Applications > Recorder > Configuration**.

Available settings are:

- **Call filters:** as in sniffing mode all calls can be recorded, it may be necessary to specify and record only some of them. Using this filter, in combination with the extension attributes (create a new attribute named "rec" and with value 1, in the **Attributes** page, see [1]), the system will search in the selected field/s the call metadata. If matched the system will record the call.

Fields to be used as filters are:

- *Extension*
  - *Description*
  - *Device Name*
  - *IP Address*
  - *Model*
  - **Enable segmentation:** it is possible to constantly record the mirror port stream, even on no active calls. In this case, files will be cut at the duration set here;
  - **Enable stereo recording:** if flagged, audio will be recorded in stereo;
  - **Show calls without metadata:** if necessary, using SNMP requests, it is possible to get a real-time table showing active calls (dynamic mode) or the desired extensions (even if not involved in any calls; static mode). Flagging this option, the system will present in the table even calls with RTP signalling, of which the only known data is the IP address.
- Additional settings are:
- *Metadata alarm time:* call status is changed to alarm if call metadata are not available for longer than the time inserted here (in seconds);
  - *Minimum meaningful duration:* minimum duration for a call to be put on the table;
  - **SNMP Table mode:** select whether to show active calls only (**Dynamic**) or a static list of extensions (**Static**) in the table requested via SNMP.

- **Blacklisted IP:** calls involving the IP addresses inserted here will not be recorded. Separate IP address with commas;
- **Pcap filter:** insert here pcap filters to best define which calls to be recorded;
- **Subnet:** it is possible to record only calls from the desired subnet, selecting it from the list.

Settings are stored by clicking **Save**, but it may be required to restart the recording service to apply them. In case, a pop-up will notify this.



**Once completed all settings, activate the sniffer recorder. Go to Administrator > Monitor > Services, click on Enable service and then Start**

## 4.2 Playback station

The **Playback station** allows to search and listen the recordings collected.

Channel Source	Service ID	Data0	Data1	Date	Duration
...	Extended VRS	-	-	03/12	
...	Extended VRS	270	202	30/11	
...	Extended VRS	270	202	30/11	
...	Extended VRS	270	202	30/11	

### 4.2.1 Recording archive

The **Recording archive** section shows all collected recordings in the selected timespan and allows to complete basic or advanced searches, clicking on **Advanced Search**.

Clicking on a recording, the system shows all the related details.

Default details are:

- **Record state:** provides information on the recording storage (online, archived, ...);
- **User:** the user who completed the recording (if available);
- **Database ID:** the ID of the database where the recording is saved;
- **Record ID:** the ID of the recording;
- **Channel source:** the extension that completed the recording;
- **Service ID:** identifies the recorder;
- **Start time:** recording start time;
- **End time:** recording end time;
- **Duration:** recording duration;
- **Call party 1** and **Call party 2:** call participants;
- **Marked:** recordings can be marked to easily find them;
- **Tag:** it is possible to add comments or tags to the recording.

**Selected record details**

Record state: File available in the local filesystem - Not archived

User:

Database ID: 85461

Record ID: 16774782855.00000005

Channel Source: Extended VRS Gateway

Service ID: Extended VRS Gateway

Start time: 03/12/2018 15:28:19

End time: 03/12/2018 15:28:34

Duration: 00:00:15

Call Party 1: 270

Call Party 2: 214

Data2: 236 SPLIT

Data3: 1111

Data4:

Data9:

Data10: 0/0

Call ID: VESTA-fcc9bd8-ae00a8c0-13c4-5506-669db-2bee5bb8-669db

Data11: 33

Data12: 8137

Caller (long number): VESTA

Called (long number): 1111

Data17: 20181203142819102

Data18: 20181203142834123

CommunicationType: MIXED

Data30: ulaw

SimplexDuplex: OUTGOING

Data22: VESTA-fcc9bd8-ae00a8c0-13c4-5506-669db-2bee5bb8-669db

AIEncryptionType: 214

CalledPartyType:

InfoValue1: 1

Marked:

Tag:  Save

0:00 0:02 0:04 0:06 0:08 0:10 0:12 0:14

15:28:19

Additional details can be configured in the **Custom fields** section. It is possible to listen to the recording and browsing it to the desired point, thanks to the soundwave showed by the system.

Clicking on **Download**, it is possible to download locally the recording.



**The download start may take a while as the recording has to be converted first.**

To search for the desired recording, simply use the dedicated area.

▼ Recordings archive

Timezone:

From:  -  To:  -

Search:

Extended time filter

Advanced Search

The **basic search** interface allows to set:

- **Timezone**: select the desired timezone;
- **From**: select the search start date/time. System will show all recordings collected from this date/time;
- **To**: select the search end date/time. System will show all recordings collected up to this date/time;
- **Search**: insert here keywords. The system will search them in all detail fields.
- **Extended time filter**: this option allows to show all calls that took place in the selected time span, including calls started before the **From** field, but ended in the time span, and those started before the **From** field and ended after the **To** field.

▼ Recordings archive

Timezone:

From:  -  To:  -

Search:  Extended time filter

Advanced Search

Marked <input type="checkbox"/>	Duration (s) <input type="text"/>
Database ID <input type="text"/>	Record ID <input type="text"/>
Source <input type="text"/>	Service ID <input type="text"/>
User <input type="text"/>	Tag <input type="text"/>
Caller DN <input type="text"/>	Called DN <input type="text"/>
Facility <input type="text"/>	Calling Subaddress <input type="text"/>
Called Subaddress <input type="text"/>	Redirecting Number <input type="text"/>
Connected Number <input type="text"/>	Display <input type="text"/>
Cause <input type="text"/>	Connection Point <input type="text"/>
Channel <input type="text"/>	Call Reference <input type="text"/>
Proceed TS (ms) <input type="text"/>	Connected TS (ms) <input type="text"/>
OTDI <input type="text"/>	Caller FN <input type="text"/>
Called FN <input type="text"/>	Caller eFN <input type="text"/>
Called eFN <input type="text"/>	UUS Text <input type="text"/>
eLDA (gps) <input type="text"/>	DSD Alarm <input type="text"/>
Alert Dispatcher <input type="text"/>	CHPC Mobile <input type="text"/>
CHPC Collector <input type="text"/>	Priority <input type="text"/>

Show all calls

The **advanced search** interface, available clicking on the **Advanced Search** option, allows to set additional fields as search parameters, including all fields configured in the **Custom fields** section.

Recordings and search results are listed below the search area, on a table providing all relevant details at a glance.

Playback		Scenario		1 to 5 items of 5 Recordings found			
	Channel Source	Service ID	Call Party 1	Call Party 2	Date	Duration	
		Extended VRS	270	214	03/12 15:28:58	00:00:00	
		Extended VRS	270	214	03/12 15:28:43	00:00:15	
		Extended VRS	270	214	03/12 15:28:34	00:00:00	
		Extended VRS	270	214	03/12 15:28:19	00:00:15	
		Extended VRS	-	-	03/12 10:27:37	00:00:01	

Except for the **Date** and **Duration** fields, all other details shown in the table can be changed from the **Custom fields** section (see **Errore. L'origine riferimento non è stata trovata.**)



**Please note that:**

- **Conference calls are reported like multiple calls in the table;**
- **Users can set the desired number of calls shown in a single page (10, 30, 50, 100 or 200);**
- **Search text fields, like *Search* or all fields in the advanced search, will match all results including the inserted value. If various fields have been filled and at least one of them does not match any result, no results will be provided in the recording table.**

The icons on the left of each recording highlights recording status:

	Recording available online, but not yet archived.
	Recording available online and already archived.
	Recording archived, but not available online.
	Recording not available.

### 4.2.2 Call Scenario

For particular needs, like post-incident analysis, it is possible to join more recordings for scenario reconstruction.

The screenshot displays the 'Scenario' tab in the Playback station. At the top, there are tabs for 'Playback' and 'Scenario'. Below them, a search bar indicates '1 to 5 items of 5 Recordings found'. A table lists the recordings with columns for Channel Source, Service ID, Call Party 1, Call Party 2, Date, and Duration. The selected record details section shows a waveform with a play button and a progress bar. The 'Build Scenario' section includes a checkbox for 'Cut mixed file according to filter time interval', a text box showing 'File selected : 2', and 'Build' and 'Show files' buttons. At the bottom, a table shows the audio file length as 00:00:39 and a list of the included recordings with their start and end times.

Channel Source	Service ID	Call Party 1	Call Party 2	Date	Duration
Headset - VRS	Extended VRS	270	214	03/12 15:28:58	00:00:00
Headset - VRS	Extended VRS	270	214	03/12 15:28:43	00:00:15
Headset - VRS	Extended VRS	270	214	03/12 15:28:34	00:00:00
Headset - VRS	Extended VRS	270	214	03/12 15:28:19	00:00:15
Headset - VRS	Extended VRS	-	-	03/12 10:27:37	00:00:01

Start time	End time	Channel Source	Service ID	Data0	Data1
00:00:00	00:00:15	Headset - VRS	Extended VRS	270 212	214 215
00:00:24	00:00:39	Headset - VRS	Extended VRS	270	214

The **Scenario** tab of the **Playback station** allows exactly to do this, selecting recordings from the list and joining them simply clicking on **Build**.

The resultant audio file will start at the beginning of the first recording and will end at the end of the last one. If between the files there is a gap, the resultant file will have no sound in this period; if the files are overlapping, the resultant file will present them overlapped.

In the example of the image above, the resultant audio file lasts 39 seconds: the first 15 seconds include the audio of the oldest recording, then there are 9 seconds of silence and, at the 24<sup>th</sup> second, there are the 15 seconds of second recording.

It is possible to create an audio file of the same length of the time span selected in the search area flagging the **Cut mixed file according to filter time interval** option. This file will include only selected recordings anyway.

Once built, the scenario can be easily downloaded clicking on the **Download** button.

### 4.2.3 Convert native or encrypted audio files

▼ Convert native or encrypted audio files

File  No file chosen

Decryption key

The **Convert native or encrypted audio files** allows to listen to files retrieved from backup paths. These files are converted from the native file format (or the compressed/encrypted file) to a standard wave file, compatible with the most common media players.

To import these files:

- identify its path and name directly on the backup archive or using the playback station search options (see 3.2.1);
- click on the **Choose file** button and select the file to upload and convert;
- click on **Convert audio file** button.



**If the file is encrypted, insert the decryption key in the Decryption key textbox.**

## 4.3 Recording export (only for supervisors and administrators)

The **Recording export** page allows to easily export single or multiple recordings to external storages for post-processing or other needs.

**Recordings export**

▼ Archive

Timezone

From  To

Search  Extended time filter

Advanced Search | Select All | Deselect All

1 to 5 items of 5 Recordings found						
Channel Source	Service ID	Data0	Data1	Date	Duration	
	Extended VRS	270	214	03/12 15:28:58	00:00:00	
	Extended VRS	270	214	03/12 15:28:43	00:00:15	
	Extended VRS	270	214	03/12 15:28:34	00:00:00	
	Extended VRS	270	214	03/12 15:28:19	00:00:15	
	Extended VRS	-	-	03/12 10:27:37	00:00:01	

**Export actions**

Recordings **2**

Storage type  Download  Network share

Share Folder

Recordings can be searched using the same search interface seen in the **Playback station** page. Simply select the recording/s from the list and select the desired storage type.

Available storage types are:

- **Download**: download file locally;
- **Network share**: download the file to the desired share folder, that can be selected from the **Share Folder** dropdown menu (new share folders can be created in the **Administrator > Configuration > Share folders** page. See [1] for further details)

## 5.

### 5.1 License request

In order to use the application server, you need to request, get and upload a valid system license.

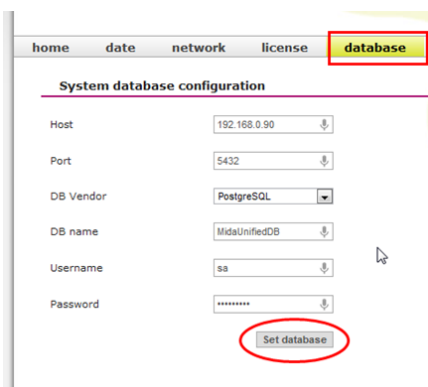
In the

Access the Appliance Control Panel (PDC): <http://xxx.xxx.xxx.xxx:8090>

Username: **admin**

Password: **admin**

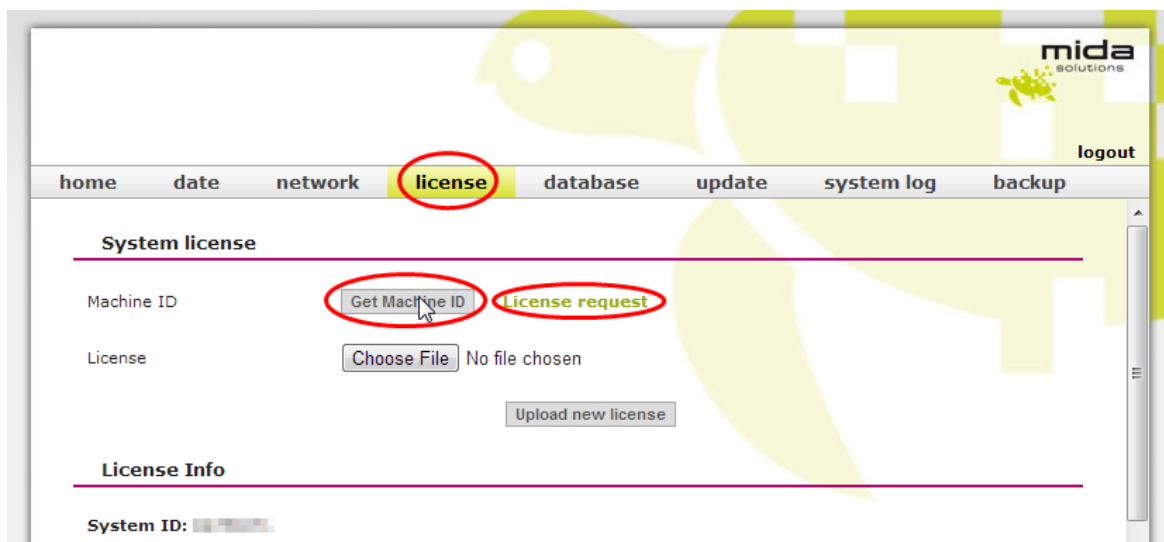
Enter in the database section and verify that the Host IP address is the one assigned to the virtual appliance.



Press **Set database** and wait a few minutes for the system to set the database connection settings.

Enter the license tab (see picture below)

Press **Get Machine ID**



Download the **MidaGetLicense.mmid** file from the system.

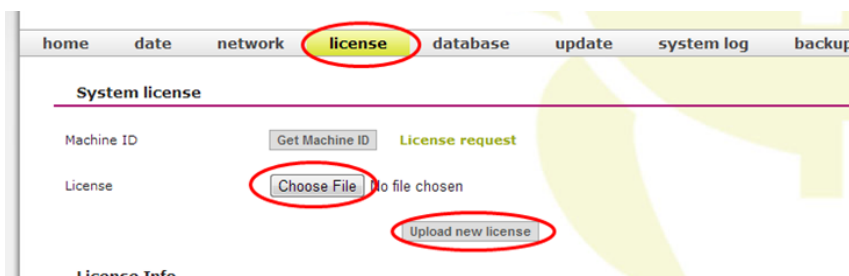
The .mmid file is what you need to submit a license request; once downloaded make sure you have Internet access and click on **License request**.

The license request form (<http://www.midasolutions.com/support/license-request/>), see following picture, shall be filled reporting all relevant information such as your name and surname, email address, phone number, end customer company name, and reseller or System integrator you prefer to involve.

Upload the Machine ID file you just downloaded (.mmid) and specify the license type you are requesting: trial or final license. Click on the authorization flag, insert optional notes and press submit.

You'll receive immediately a confirmation email and Mida will process your request as soon as possible.

Load the license file received from Mida Solutions. The Mida License file extension is .mlic and will be provided by Mida Solutions.



Press **Upload new license** and then check the updated license status (see picture below).





Now the VM can be accessed using any PC with a standard web browser

2. Appliance Control Panel (PDC): <http://xxx.xxx.xxx.xxx:8090>
3. Appliance main web portal for administration and users: <http://xxx.xxx.xxx.xxx>

Where:

- Xxx.xxx.xxx.xxx is the IP address or host name given to the VM
- User administrator credentials to use
  - Username: admin
  - Password: admin

**For further details on the Control Panel please refer to “*Mida\_Appliance-Administration\_Manual.pdf*”, section 2.**

**For further details on the main platform portal and administration options please refer to “*Mida\_Unified\_Portal-Administration\_&\_User\_Manual.pdf*”.**

