Televes®

Arantia TV Tool Handbook

Release 1.6.X

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1. *Changelog*

1.1 Version 1.1.0

Date: June 1, 2018

- Added:
  - *Changelog*
    - "*Changelog*" section added (Middleware team)
  - Introduction
    - "Introduction" section added (Middleware team)
  - *Login*
    - "*Login*" section added (Middleware team)
  - Guests
    - "Guests" section added (Middleware team)
  - Rooms
    - "Rooms" section added (Middleware team)
  - *Players*
    - "*Players*" section added (Middleware team)
  - *External Devices*
    - "*External Devices*" section added (Middleware team)
  - Channels
    - "Channels" section added (Middleware team)
  - Media
    - "Media" section added (Middleware team)
  - Personalization
    - "Personalization" section added (Middleware team)
  - Menu Designer
    - "Menu Designer" section added (Middleware team)
  - Statistics
    - "Statistics" section added (Middleware team)
  - Services
    - "Services" section added (Middleware team)
  - Widgets
    - "Widgets" section added (Middleware team)
  - Hotel
    - "Hotel" section added (Middleware team)
  - Configuration
    - "Configuration" section added (Middleware team)

- Modified:

- Deleted:

1.2 Version 1.2.0

Date: July 15, 2018

- Added:
  - *Changelog*
    - Version 1.2.0 added (Middleware team)
  - Guests
    - New references to mobile devices added (Middleware team)
  - Hotel
    - "Display types" section added (Middleware team)
  - Menu Designer
    - New references to mobile devices added (Middleware team)
  - Personalization
    - Added new references to mobile application (Middleware team)
  - *Players*
    - Added new references to mobile devices (Middleware team)
  - Rooms
    - New references to mobile devices added (Middleware team)
  - Services
    - "Connect my device" service added (Middleware team)
    - "External services" and "External services types" sections added (Middleware team)
  - Media
    - "Genres" and "Contents" sections added (Middleware team)

- Modified:

- Deleted:

1.3 Version 1.3.0

Date: July 31, 2018

- Added:
  - *Changelog*
    - Version 1.3.0 added (Middleware team)
  - Statistics
    - "User statistics", "Emails to report", "Rooms in report", "Packages report" and "Content report" sections added (Middleware team)
  - Configuration
    - "Update options" and "About" sections added (Middleware team)

- Modified:
  - Media
    - Genre edition and creation form has been modified (Middleware team)
    - Contents edition and creation form has been modified (Middleware team)

- Deleted:

Version 1.3.1

Date: August 30, 2018

- Added:
  - Services
    - "OTT applications list in Arantia TV" section added (Middleware team)

- Modified:
  - Rooms
    - "List and edit *players* in a room" section has been modified (Middleware team)
    - "Create a new room" section has been modified (Middleware team)

- Deleted:

1.4 Version 1.4.0

Date: December 20, 2018

- Added:
  - *Changelog*
    - Version 1.4.0 added (Middleware team)
  - Media
    - "Audios" section added (Middleware team)
  - Statistics
    - "Alarm logs" section added (Middleware team)
  - Hotel
    - "Alarm monitors" section added (Middleware team)
  - Template designer
    - "Template designer" section added (Middleware team)

- Modified:
  - General
    - Some images have been replaced to show new sections in the left-side menu of the tool (Middleware team)
  - Services
    - "Service list" section has been modified to add new Arantia TV services in the interface (Middleware team)

Version 1.4.3

Date: February 15, 2019

- Added:
  - *Changelog*
    - Version 1.4.3 added (Middleware team)
  - Rooms
    - Subsections related to players tun off and players' screen turn off have been added to "List and edit *players* in a room" section (Middleware team)
  - Template designer
    - "Structure", "Cells", "Translations" and "Preview" sections added (Middleware team)
  - Configuration
    - Subsections related to players tun off and players' screen turn off have been added to "*Players* list" section (Middleware team)

- Modified:
  - General

    * Some images have been replaced to show new sections in the left-side menu of the tool (Middleware team)
    * Some sections have been relocated to be consistent with the tool menu (Middleware team)
  - Guests
    * Modifications in some text related to the option to leave the genre field empty (Middleware team)
  - Rooms
    * "Room list" section has been modified (Middleware team)
    * "List and edit *players* in a room" section has been modified (Middleware team)
    * "List and edit alarms in a room" section has been modified (Middleware team)
    * Modifications in some of the links to sections that have been relocated, like *external devices* or *players* (Middleware team)
    * The list of fields and the images have been modified in the "Room import" section (Middleware team)
    * Images of the alarms list have been updated with the new fields available (Middleware team)
  - Channels
    * Channel import description modified to include a new field for packages (Middleware team)
  - Statistics
    * "Contents report" section has been modified, it is not available in this version (Middleware team)
  - Services
    * Modifications in the services available in the menu (Middleware team)
    * Modifications on ott apps list available for Samsung (Middleware team)
  - Widgets
    * "*Weather*" section modified to indicate that only one weather widget is supported (Middleware team)
  - Hotel
    * Player types modified to delete reference on wakeonlan (Middleware team)
    * "Rates" section modified to remove fraction rates (Middleware team)
  - Network
    * "DHCP" section modified (Middleware team)
  - Configuration
    * "Players list" section modified (Middleware team)

- Deleted:
  - Media
    * "*Genres*", "*contents*" and "*texts*" sections have been removed from media section (Middleware team)
    * References to *shared* images field have been deleted (Middleware team)

1.5 Version 1.5.0

Date: March 15, 2019

- Added:
  - *Changelog*
    - Version 1.5.0 added (Middleware team)
  - Guests
    - User Preferences section added. (Middleware team)
    - Images about User Preferences have been added. (Equipo Middleware)
  - Rooms
    - Messages to Rooms section added. (Middleware team)
    - Messages to Room Groups section added. (Middleware team)
    - New clarifying comments on available fields for parent rooms and children rooms. (Equipo Middleware)
    - Multiple Room Edition section added. (Middleware team)
  - Channels
    - Comments added to indicate that channels and channel packages can only be assigned to rooms without any sub-room. (Equipo Middleware)
  - Network
    - A section for default gateway selection has been added to network configuration. (Equipo Middleware)

- Modified:
  - Guests
    - Section images modified. (Equipo Middleware)
  - Rooms
    - The subsections order for rooms and room groups has been modified. Instead of: edit, delete, create; now they are listed as create, edit, delete. (Equipo Middleware)
    - Section links modified. (Equipo Middleware)
    - Room import field list modified. (Equipo Middleware)
    - Rooms and room groups fields list modified. (Equipo Middleware)
    - Section images modified. (Equipo Middleware)
  - Services
    - "Services list" section modified to include the new Arantia TV services. (Equipo Middleware)
  - Network
    - Range field descriptions have been modified in DHCP instances. (Equipo Middleware)

- Deleted:
  - Rooms
    - The references to channels, menus and styles in room groups have been removed. (Equipo Middleware)

1.6 Version 1.6.0

Date: March 30, 2019

- Added:
  - *Changelog*
    * Version 1.6.0 added (Middleware team)
  - DHCP:
    * Players reboot warning after changing DHPC range added. (Middleware team)

- Modified:
  - Guests
    * Images about User Preferences have been updated. (Equipo Middleware)
  - Menu Designer
    * Some screenshots of Music service have been edited. (Middleware team)
  - Template designer
    * Reference to background video templates removed from texts and screenshots. (Equipo Middleware)
  - DHCP:
    * Comments updated. (Equipo Middleware)
  - Network:
    * "Mode" option has been removed from the network interfaces. (Middleware team)

- Deleted:

Version 1.6.1

Date: April 1, 2019

- Added:

- Modified:

- Deleted:

Version 1.6.2

Date: April 5, 2019

- Added:

- Modified:

- Deleted:

Version 1.6.3

Date: April 5, 2019

- Added:

- Modified:

- Deleted:

Version 1.6.4

Date: April 9, 2019

- Added:

- Modified:

- Deleted:

Version 1.6.5

Fecha: 10 de Abril de 2019

- Added:

- Modified:
  - Media:
    * Images updated. (Equipo Middleware)
  - Hotel:
    * Rates images updated. (Equipo Middleware)

- Deleted:
  - Media:
    * Contents and genres, as well as any reference to them, have been removed from the corresponding sections. (Middleware team)
  - Statistics:
    * Contents reports have been removed. (Middleware team)
  - Servicios:
    * Eliminación de servicios externos y tipos de servicios externos, así como de las referencias a estos en los diferentes subapartados de la documentación. (Equipo Middleware)

2. Introduction

The goal of this handbook is to be a guide for the correct use of the Arantia TV administration tool, which allows the person or team in charge to manage everything related to an Arantia TV installation: rooms, devices, settings, styles, channels, etc.

This introduction will explain common functionalities for the following specific sections, as well as some concepts that will help to better understand the context.

2.1 Background

In this section, we provide a table to explain the terms that will be used along this documentation, to avoid any confusion due to misinterpretation in any of the sections in this guide.

Element in Arantia TV environment	**Phrase used in this documentation**
Places where the Arantia TV interface will be used (hotels, hospitals, etc)	installations
Arantia TV administration tool	tool
Arantia TV interactive interface that will be displayed in the rooms of the installation.	interface
Person (or team) with access permission to the tool who are making use of it	user
Installation client and final user of the services provided by the Arantia TV interface	guest
Devices for playing the Arantia TV interface (televisions, STBs, smartphones, tablets, etc)	*players*
Devices for playing smartphones or tablets contents in Arantia TV and viceversa	*external devices*
Arantia Video System	AVS

2.2 Forms

Some elements in this tool are common for several views or forms. This section explains how to use them.

- Any field showing grey color within a creation or edition form is not editable by the user.

Fig. 2.1: *Example of a non editable (Guest) and an editable (Room) field in a form*

- "Search" function, that can be found on top of most of the objects lists (guests, rooms, channels, styles, etc), has four fields:

Fig. 2.2: *Search frame in the tool*

- First of them allows the user to introduce the set of characters to be found within the elements in the list below.
- The second element has the same function as clicking the "Enter" key after entering a search term in the edit field. This button runs the search of the key word within the list below.
- The third button clears previous results, all the elements will be listed again and the search parameters (keywords, filters) will be erased.
- For a more detailed search the last button can be used. A pop-up form appears on the screen to select the fields in the table below on which the advanced search will be done.

Fig. 2.3: *Advanced search panel of the tool*

- For displaying a higher or lower number of elements per page in the current list, there is an option below each table to change this number. After introducing the number of desired entries per page, click on to apply.

Fig. 2.4: *Customised view of a list*

- For a better usability when dealing with actions on several elements at the same time, the option Check all available at the end of every list can be used to select all the elements displyed in the current page when clicked by the user. Actions that can be made simultaneously with several elements are, for example, reboot or register in case of a list of *players*, and/or delete them if we are dealing with any kind of list.

Fig. 2.5: *Selecting several elements in a list*

- On top of most of the objects lists Delete selected button can be found, placed next to the + New button in most of the tool views. This button is used to delete all the elements that have been previously selected,

using their own selection panel ( ) or the global selection Check all . The procedure is the same as clicking on the icon for deleting an element: a confirmation dialog will be showed on the right side for the user to validate the deletion of the selected element by clicking on the Delete button.

Fig. 2.6: *Deleting several objects from a list*

- Some fields in the forms allow to select multiple elements. To achieve this, press "Control" in the keyboard ("Command" if using a Mac OS computer) while clicking on the elements to be selected.

Fig. 2.7: *How to highlight several options in a selectable field*

To highlight all of the elements available in the field, left *click* over one of them and afterwards press "Control" + "A".

Fig. 2.8: *How to highlight all the objects in a selectable field*

Important: Please note that every information available in this manual is valid on the premises the user is logged under "admin" user, which has the highest administration permission.

3. *Login*

3.1 *Login* the tool

To enter the administration tool, a registered user name and password must be entered.

Fig. 3.1: *Login panel in the tool*

Once logged, option menu will appear on the left side. Depending on the user permissions, there will be different options in this menu.

Fig. 3.2: *Menu options for an "admin" user*

Fig. 3.3: *Menu options for a "customizer" user*

On the left side of the toolbar on top, the menu for changing the tool language and the current date in the system are placed. Also in this bar, but on the right side, the logged user is displayed. *Clicking* on the user will open the logout option.

Fig. 3.4: *Tool language modification*

Fig. 3.5: *Tool logout*

To create, delete or edit users, enter the section *"Configuration -> Users"* in the menu on the left side of the tool.

4. Guests

4.1 Guests list

Selecting the option “Guests -> Guest Lists” in the menu on the left side of the tool, a list will be opened with all the guests currently registered in the tool.

Fig. 4.1: *Guests panel in the tool*

This list shows the name and language of the guests, and the *check-in* date in their room or rooms. Next to this information, on the right, there is a column with different options that can be selected, like listing the guest preferences, checking which rooms a guest is occupying, displaying the expenses made to the date, edit his data, or removing the client from the system.

Guest preferences

Once clicked on the icon, a panel will be opened right to the list, showing the preferences selected for this guest. In this new panel, the user can edit this preferences selecting one of the available options.

- Temperature: the measurement units can be selected amongst Celsius, Fahrenheit or Kelvin degrees.

Fig. 4.2: *Guest preferences*

Rooms of a guest

Once clicked on the icon, a panel will be opened right to the list, showing all the rooms currently registered to a guest name. In this new panel, the user can make the same consultations and modifications as from the section *"Rooms -> Room List"*: guest *check-out*, consult the *players* in the room and check or create expenses or alarms that will be associated to this room and guest.

Fig. 4.3: *Room list of a guest*

Expenses of a guest

To display all the expenses in every room where the guest is registered, the user should click on the icon in the guest list. The expenses panel will be opened, allowing to consult, edit, create and delete any of the expenses a client shall make during the .

Fig. 4.4: *Expenses list of a guest*

Edit a guest

To modify the name, genre or language of a guest, the user has to click, for that guest, on the icon in the guest list. A panel on the right will open to edit the guest information.

Fig. 4.5: *Editing data of a guest*

Note: Changing a guest language in this form will modify the language in all of the *players* in the rooms where the guest is registered.

Warning: Name field is mandatory to create a new guest. Language will always have a value selected.

Delete a guest

To permanently remove a guest, click on the icon, a confirmation panel will be opened. To remove the guest just click on the Delete icon. To cancel this action click on the Cancel button.

Fig. 4.6: *Confirmation panel for deleting a guest*

Warning: Note that a guest can not be removed from the system if there are registered expenses to be paid. In this case, when confirming this action clicking on the Delete button a message will appear informing the user that this guest can not be deleted until these expenses have been paid.

Fig. 4.7: *Confirmation panel for deleting a guest with pending expenses*

Note: Note that, in case of removing a guest with all the expenses already paid, the guest will be *checked-out* of all the rooms, rebooting every *player* in those rooms (guest private data will be cleared in those *players*). As well, any expenses, alarms and mobile type *players* assigned to the guest will be deleted in the database.

4.2 Create a new guest

To add a new guest in the system, the user have to press the New button located on the top right of the "Guest List" panel, next to the Delete selected button. Once pressed this button, a form will be opened on the right side for entering the information of the new guest: genre, name, language, *check-in* date and room or rooms registered to this guest.

Fig. 4.8: *Creating a new guest*

Note: The guest language in this form will define the initial language for all of the *players* in every room where the guest stays.

Warning: It is not possible to create a guest in this form without assigning a name, arriving date and room, as well as a language (there will be always a default value for this field).

Fig. 4.9: *Required fields when creating a new guest*

5. Rooms

Once clicked on the rooms section in the left side menu, several different panels will be opened, to consult and modify any parameters related to the rooms.

5.1 Room groups

When selecting the "Rooms -> Room groups" element from the left-side menu, the current groups in the tool will be listed in the screen. These groups allow to filter and classify the rooms by any parameter the user may need. As an example, the rooms could be grouped per floor, area in the installation, or any other special condition like pet friendly room or suitable for people with condition.

The same room can be included in more than one group. For further information regarding the rooms, check the *rooms list* section.

Note: When creating a sub-room, this will inherit the groups from the parent room.

Fig. 5.1: *Panel of room groups in the tool*

The buttons to consult, edit and delete a room group are located on the right side of the list. Besides, multiple delete Delete selected, and create a room New buttons are placed on the top right corner of this panel.

Create a new group of rooms

When pressing the New button, a form to create new groups appears on the right side of the screen. The fields displayed on this new room group creation panel are:

- Name: name to identify the group. This field is mandatory.
- Colour: the user can select a colour to quickly identify the group in the *rooms list*.
- Rooms: selection of rooms included in the group. It is allowed to create an empty group.

Fig. 5.2: *Creating a group of rooms*

List of rooms in a group

Once the group has been created and the rooms have been assigned, it is possible to list these rooms in two different ways.

First, the current screen ("Rooms -> Room groups"), presents a button to display the rooms belonging to the group.

From this panel, it is not allowed to add new rooms, but any of the existing can be edited or deleted. For further information regarding room edition, consult *"Rooms -> Room list -> Edit room"*.

Fig. 5.3: *List of rooms in a group*

Alternatively, it is possible as well to consult the rooms included in a group from the *rooms list* panel. To access, just click on the group label inside de room card.

Fig. 5.4: *Detail of a room box*

Fig. 5.5: *List of rooms in a group, obtained pressing "Pet Friendly Rooms" group label*

Manage group messages

The management tool allows the user to send *messages to individual rooms* as well as to room groups. To consult and send messages to a rooms group (and its sub-rooms), the messages icon should be pressed, opening on the right side of the screen a panel with the messages currently sent to the rooms.

The list includes the fields below:

- Message subject: title or reason to send the message.
- Status: number of rooms out of the total that already have read the message.
- Persistent: permanent group messages that have not been completely removed and will be displayed every time there is a new guest check-in in any of the rooms of the group.
- Date: date the message was sent.

Fig. 5.6: *List of messages in a group*

Create and send a group message

To send a message to the *players* in the rooms (and their corresponding sub-rooms), the user just needs to press the New button located in the top-right corner of the messages list. After pressing this, the message creation panel will appear on the right containing the following fields: subject, message text, save time (default current time), and if the message is permanent or not (non permanent as a default).

Once the fields in the form are complete, the user shall press ✔ Send button and the contents will be sent to all the *players* in the rooms where the guest is currently registered.

Fig. 5.7: *Group message creation and delivery form*

Note: Regarding non persistent groups messages, these will only be sent to currently occupied rooms.

Note: "Subject" and "Save time" are mandatory fields in the form, although "Save time" would have a default value.

Note: The sender for every message from the tool will be "Hotel front desk".

Edit a group message

Groups messages edition can be accessed pressing on the icon of the corresponding group message. A panel will appear on the right side to edit the persistency parameter.

Fig. 5.8: *Editing the persistency of a group message*

Note: To mark a message as read in a given room, this room should be accessed from the management tool, as described in *"Edit a message"*.

Delete a group message

To delete a message from a rooms group, regardless it is marked as read or not, the Delete button of the corresponding message shall be pressed, to open on the right side the confirmation panel. To permanently delete this message, the user should press this Delete button.

Fig. 5.9: *Deleting a group message*

Note: If the user needs to delete the message on a given room, the room has to be selected in the tool, and then the message can be deleted as described in *"Delete a message"* section. If the message was selected as permanent, it will be generated again the next time there is a guest *check-in* on the room.

Warning: Guests may as well delete any message from the Arantia TV interface, removing these from the system, if they are not permanent. If this happens, it will not be possible to access them from the tool as they would have been completely remove from the tool.

Edit a rooms group

When clicking the icon in a group of rooms, the edition form is opened on the right. This section allows to modify the fields in the group: name, identifying colour, and rooms included.

Fig. 5.10: *Editing a group of rooms*

Delete a rooms group

To delete a group of rooms, just press the button of the corresponding group to be removed. To confirm this action, click on Delete.

Fig. 5.11: *Deleting a group of rooms*

Note: When removing a group, the rooms that were part of it will not be deleted.

5.2 Room list

The user can list the current registered rooms accessing the “Rooms -> Rooms list” element on the left-side menu, showing an information card for each of the rooms with their basic information like number, name , name of the registered guest, groups where this is included and actions the user can execute for the room.

Fig. 5.12: *Panel of rooms in the system*

Actions for the rooms

For each room, it is possible to take the following actions:

- Consult and modify the guest in a room ( ), in case there is any.
- *Check-in* or *check-out* of a guest in the room (or).
- List / edit the existing *players* in a room ( ).
- List / create messages for a room.
- List / edit the registered *expenses* of a room and its guest ( ).
- List / edit the alarms registered in the *players* of a room ( ).
- Edit the room ( ).
- Consult and modify the sub-rooms of a room (clicking on its name, in case there is any sub-room).

Note:

- It is important to note that messages , expenses and alarms options will only be available for those rooms where there is a guest currently registered.
- Available actions may vary depending on the user permission level.

Besides the mentioned actions, on the top-right corner of the panel, the user can find the room deletion, edition, export, import, y creation (Delete selected , Export , Import and New , respectively) buttons. Both room export and import are very useful to work with a high number of rooms.

Room creation

To register a new room, just click the New button located on the top right-hand corner of the rooms list.

After pressing this button, on the right side a register form will appear, containing the fields described below.

Fig. 5.13: *New room creation form*

Form fields

The fields of the creation form of a room are:

- Room number: number identifying a room. This is the only mandatory field in the form.
- Name of the room: descriptive field of a room.
- Type of room: label to describe different room types available in an installation. This could help the user to classify the rooms by attributes or purpose. Some examples for the room type could be: bedroom, suite, hall, meeting room, etc. Room types management is available in *"Hotel -> Room Types"*.
- Room groups: allowing to group rooms sharing the same features (decided by the user), as the floor or place where they are located, or any special characteristics the user may consider. Room groups management is described in detail in *"Rooms -> Room Groups"*.
- Parent room: some installation may have rooms that include one or more different areas or sub-rooms. The parent room field is a drop-down menu where the user can select amongst all the previously created

rooms or sub-rooms that are eligible to be selected as parent room. If any room is selected, this will be the predecessor for the new room when the registration process is complete, inheriting the group inclusion.

Note:

- After creating a sub-room, some fields that were in the parent room (channels, packages, styles and menus) will only be available in the child rooms.
- For a parent room, after creating the first sub-room, the channels and packages will be assigned to this sub-room, and removed from the parent room.
- As a pre-condition to create sub-rooms, if there is a *player* registered to a room, this assignation should be deleted before this room can be used a a parent for any other.
- As a default, if no parent room is selected, the new room is not a child for any other.

- Guest: If selected, a *check-in* of that guest will be registered when clicking Save in the form. If none is selected, an empty room will be created.
- Channels: full list of channels that can be selected to play in the room *players*. In case there is no channel selected in this field, no channel could be played in the room *players* (exception made that there is a channel package selected, as mentioned in the point below): Channel management is possible in *"Channels -> Channel list"* section.
- Channel packages: sets of channels, that can be selected as free or paid. If a package is selected in this field, it is not necessary to select the channels in the point before. In case only some of the channels included in the package should be assigned, the package has to be selected and the individual channels to be included should be selected in the previous field of the form, *Channels*. In this case, the channels assigned will be free for the *players* in the room. Channel packages management is done in *"Channels -> Packages"*.

Note: If it is required that any of the channels in a given package are not available in a room, both package and the channels belonging to it shall be kept unselected.

- Style: personalizes the logo to be shown in the *player* interface, as well as the background displayed in case there is no channels assigned to a room. Styles can be created, edited and deleted in *"Personalization -> Logos and Backgrounds"*.
- Menu: elements and their distribution as it will be displayed in the application main menu. Menu management is done in *"Personalization -> Menus"*, where there is a tool available to personalize elements like menu icons size, colour and distribution on the screen, as well as other characteristics.
- Location: drop-down field with all the available locations in the system. These should have been previously installed and can not be modified in the tool.
- Parental control code: required to validate purchases.
- Mobile code: it is mandatory for pairing the mobile with the *player* in the "Connect my device" service. Thanks to the Arantia TV mobile app, the smartphone or tablet can be used as a TV remote control, as well as accessing other services. If the field is left empty, a random code will be generated automatically, which will be displayed in the "Connect my device" service whenever a mobile device has to be paired.
- Mobile devices limit: defines the maximum number of mobile devices that can be handled from the "Connect my device" service. As a default "0" is selected, meaning there would be no limitation to the number of devices that can be connected from this room.
- First time: it is required to show the welcome message in all the *players* of a room at *check-in* time. The welcome message has been configured in *"Personalization -> Template Designer"*.
- Include in statistics report: it indicates if statistical data of services visits, channels, etc in this room should be included in the statistics report. This file can be accessed immediately in the section *"Statistics -> User*

statistics", or can be sent attached in an email communication (now or periodically) from *"Statistics -> Email reports"*.

Warning: Whenever a channel is associated to a room selecting it in the "Channels" field, this channel will be free for that room, independent of it belongs to a pay package or not. For a this to be a pay channel, it should be included unique and exclusively into a pay package, which should be assigned to the corresponding room in the field "Channels packages".

Import rooms

Using the import feature (Import), it is possible to introduce a set of rooms in a single step. For this, just provide a .csv format complying with the below format:

1. Each row in the file (record) will define a room or sub-room, the separator character between fields must be ",".
2. **The fields and their order must be as follows:**
    - Room number.
    - Room name.
    - First time for the guest in the room (possible values: *True* or *False*).
    - Parental control code.
    - (*Empty field*).
    - Location (location *id*).
    - Menu (menu *id*).
    - (*Empty field*).
    - Style (style *id*).
    - Room type (type *id*).
    - Room statistics to be included in the statistics report (possible values: `1` o `0`).
    - Code to connect the mobile device.
    - Connected mobile devices limit (must be a number equal or greater than o, where o means "no limit").
    - Sub-room level (it must be a number equal or greater than `0`, meaning "o"="main room in hierarchy", and "1"="first level child room").
3. The records must be ordered by rooms and sub-rooms, meaning that any record with a "Sub-room level" higher than the preceding will correspond to a descendant sub-room of it.

The image below shows an exported .csv file, corresponding to the previous *room list*.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	101	Room 101	True	4555	1	1		1	1	1	8518	0	0
2	102	Room 102	True		1	1		1	1	1	5	0	0
3	103	Room 103	True		1	1		1	1	1	5	0	0
4	104	Room 104	True		1	1		1	1	1	5	0	0
5	105	Room 105	True		1	1		1	1	1	5	0	0
6	106	Room 106	True		1	1		1	3	1	5	0	0
7	106	Bedroom 1	True	7766	1	1	77	1	1	1	5	5	1
8	106	Bedroom 2	True	8177	1	1	77	1		1	5	5	1
9	107	Room 107	True		1	1		1	1	1	5	0	0
10	108	Room 108	True		1	1		1	1	1	5	0	0
11	109	Room 109	True		1	1		1	1	1	5	0	0
12	110	Room 110	True		1	1		1	1	1	5	0	0
13	201	Room 201	True		1	1		1	1	1	5	0	0
14	202	Room 202	True		1	1		1	1	1	5	0	0
15	203	Room 203	True		1	1		1	1	1	5	0	0
16	204	Room 204	True		1	1		1	1	1	5	0	0
17	205	Room 205	True		1	1		1	1	1	5	0	0
18	206	Room 206	True		1	1		1	1	1	5	0	0
19	207	Room 207	True		1	1		1	1	1	5	0	0
20	208	Room 208	True		1	1		1	1	1	5	0	0

Fig. 5.14: *Exported .csv file example displayed in a spreadsheet*

```
101,Room 101,True,4555,1,1,,1,1,1,8518,0,0
102,Room 102,True,,1,1,,1,1,1,5,0,0
103,Room 103,True,,1,1,,1,1,1,5,0,0
104,Room 104,True,,1,1,,1,1,1,5,0,0
105,Room 105,True,,1,1,,1,1,1,5,0,0
106,Room 106,True,,1,1,,1,3,1,5,0,0
106,Bedroom 1,True,7766,1,1,77,1,1,1,5,5,1
106,Bedroom 2,True,8177,1,1,77,1,,1,5,5,1
107,Room 107,True,,1,1,,1,1,1,5,0,0
108,Room 108,True,,1,1,,1,1,1,5,0,0
109,Room 109,True,,1,1,,1,1,1,5,0,0
110,Room 110,True,,1,1,,1,1,1,5,0,0
201,Room 201,True,,1,1,,1,1,1,5,0,0
202,Room 202,True,,1,1,,1,1,1,5,0,0
203,Room 203,True,,1,1,,1,1,1,5,0,0
204,Room 204,True,,1,1,,1,1,1,5,0,0
205,Room 205,True,,1,1,,1,1,1,5,0,0
206,Room 206,True,,1,1,,1,1,1,5,0,0
207,Room 207,True,,1,1,,1,1,1,5,0,0
208,Room 208,True,,1,1,,1,1,1,5,0,0
209,Room 209,True,,1,1,,1,1,1,5,0,0
```

Fig. 5.15: *Exported .csv file example displayed in a text editor*

Note:

- All the fields that do not apply to a given room should be left blank.
- To avoid any problem when importing a file, the child room names should be different to the parent room or any other sub-room.

Warning:

- It is necessary that those elements specified by their ID (style, etc...) exist in the system with the corresponding ID, otherwise they will not be properly imported.
- When importing a room, the guests and registered *players* are not included.

Export rooms

Clicking on the

button a .csv file will be downloaded in the browser containing all the information about the rooms registered in the system, formatted as described in the previous section.

Warning: When exporting the room information, references to the guests or *players* IDs are not included.

Edit a room

To modify the settings of a room, click on the icon of that room to open on the right side its edition form, which is identical to *creation form of a new room*. It is recommended to consult that section for information on the fields of the form, as well as what implies to modify each of them.

Fig. 5.16: *Edition form of a room*

Note: Even though being identical to the creation form of a new room, the edition form has slight differences: #. Editing the name of a room will consequently modify the name of the possible *external devices* registered to the *players* in that room. This will be informed on the top side of the rooms list once the name of the room has been modified and the Save button has been pressed.

Fig. 5.17: *Message reporting a change of name in the external devices*

1. The fields “Parent room” and “Guest” can not be edited.
2. For parent rooms, some of the fields (channels, packages, styles and menus) will disappear as they do not apply to parent rooms and should be configured for each sub-room.

Note: Editing the fields “Group”, “Channels”, “Channel packages”, “Style” or “Menu” in a room will cause that all the *players* in the affected rooms modify in real time their channels, style and menu, if they differ from the previously selected.

Warning: Whenever a channel is associated to a room selecting it in the “Channels” field, this channel will be free for that room, independent of it belongs to a pay package or not. For a this to be a pay channel, it should be included unique and exclusively into a pay package, which should be assigned to the corresponding room in the field “Channels packages”.

Multiple room edition

It is possible to modify at a time several fields in a set of rooms. To achieve this, just select the rooms to be edited and click on the edit selected button Edit selected on the top-right corner of the room list panel. On the right a form will appear allowing to edit menu, style, location and room type fields.

Fig. 5.18: *Editing multiple rooms*

Note: For each of the available fields, selecting the ——— option will preserve the value the room had originally for this parameter. The user shall select a value for any change to be applied to this parameter in the selected rooms.

Note: If a parent room is selected, any change will be forwarded to every assigned sub-rooms.

Delete rooms

To delete one or more rooms, just mark the selection box for each of them (placed on the top-left corner of the room card) and press the Delete selected button on the top-right corner of the list.

Fig. 5.19: *Deleting two rooms*

Note: Removing a room means deleting all the association with the *players*. Besides, the name of all the *external devices* linked to those *players* will be modified as well.

Warning: A room with a registered guest can not be deleted.

Fig. 5.20: *Error deleting a room*

Warning: Deleting a room will remove as well all the related sub-rooms.

Check-in and *check-out* of a guest in a room

To register a guest in an empty room, just click on the icon on the bottom left corner of the room box. When pressing this button, a form will be opened on the right for the user to select a guest from a list and complete the *check-in*.

Fig. 5.21: *Guest check-in panel*

Note: Only one guest is allowed to be assigned to a room, but a guest may be registered in several rooms.

If the required guest is not yet in the system, this will not be in the guest list, but can be created using the "Add new guest" button, which will open a third panel on the right with the guest creation form (*"Guests -> Create new guest"*).

Fig. 5.22: *Creating a new guest for check-in*

Note: The only required field in the new guest form in the "Name". If no date is given in this form, the *check-in* date for the guest will be the moment when this *check-in* is confirmed pressing the Check In button. Otherwise, if the user clicks the Cancel button in that moment, the guest will be added to the guest list (*"Guests -> Guest list"*) with the date of creation in the system as *check-in* date.

When registering a guest in a room, new icons (and) will appear in the room box of the rooms list. Besides, the *check-in* icon ( ) will be replaced by the *check-out* icon ( ). To check-out a room, just click on this button in the room box. Press on Check Out to confirm this action.

Fig. 5.23: *Guest check-out panel*

Note: In the moment a guest leaves a room, as well as removing the guest from the system (just in case the last of the rooms the guest was staying is left), all the expenses, messages (those not registered as permanent group messages), alarms and mobile type *players* in the room will be deleted. All the *players* in that room will be rebooted, and the remaining user (guest) credentials that could exist will be deleted.

Warning: *Check-out* can not be completed if a guest has unpaid expenses. In this case, when trying to confirm this action with the Check Out button, a message will advise the user that this *check-out* is not allowed until all the expenses have been paid.

Fig. 5.24: *Check-out confirmation panel of a guest with pending expenses*

Manage the *players* in a room

To list the currently installed *players* in a room, the icon has to be pressed in the room box. This will open on the right a table with several options for each *player*, as well as information regarding its MAC, IP, type of *player* and room.

Fig. 5.25: *Panel of players in the rooms list*

Note: In this panel, the *players* installed in the possible sub-rooms of a room will be listed as well.

Manage the *external devices* of a *player*

When clicking on the icon of the "Actions" column in the *players* list, a third panel will be opened on the right listing all the *external devices* installed in that *player*, showing their name, type and associated *player*.

Fig. 5.26: *Panel of external devices of a player from the rooms list*

In this new panel different parameters and settings of these devices can be edited ( ), as well as they can be removed from the system ( ).

Note: This list of *external devices* associated to a *player* is exactly the same displayed in *"Configuration -> External devices"*, therefore the edit and delete actions are done using the same forms, with the exact result. It is recommended to consult such section to obtain a detailed information about *external devices*.

Note: Mobile type *players* do not support *external devices*, so this option will appear as not selectable in the "Actions" column.

Create a new *player*

Using the + New button of the *players* panel in a room, a new *player* can be created and registered to the room selected in the form on the right side of the *players* list. The fields defining a *player* are its IP and MAC addresses, as well as its type, room where it is installed and the language it will show when there is no guest staying in the room. This form is the same that the one mentioned in the section *"Configuration -> Players -> Create a new player"*, where the fields of the form are explained in detail.

Fig. 5.27: *Creating a new player from the rooms list*

Note: When creating a new *player*, the *player* type and the language will always have a value in the form. The rest of fields can be kept blank but it is not recommended (as an example, the *player* IP address is necessary for it to be properly rebooted). The fields "IP" and "MAC" must be unique in the system, although the IP field may be empty for several players.

Note: When creating a new mobile type *player*, some new options will appear when this type of *player* is selected in the form. These new fields are the "Managed *player*" which defines, amongst all the registered *players*, the one that will be controlled by the new mobile type *player*, and "Display type" which describes the operating system of the device.

Edit a *player* in a room

When clicking on the of the *players* list, the edit panel for such a *player* will be opened on the right. In this form, the user can modify the IP and MAC of the *player*, as well as select which its type is (configurable types in *"Hotel -> Player types"*), the room where it belongs and the language to be set in case there is no associated guest. This is the same form accessed in *"Configuration -> Players -> Edit a player"*, and the section *"Configuration -> Players -> Create a player"* describes each of the fields in detail.

Fig. 5.28: *Editing a player from the rooms list*

Note: The type of *player* and the language will always have a value in this form. The rest of fields can be kept blank but it is not recommended (as an example, the *player* IP address is necessary for it to be properly rebooted). The fields "IP" and "MAC" must be unique in the system, although the "IP" field may be empty for several players.

Delete a *player* from a room

To delete a *player*, just click on the icon for a confirmation panel to be opened on the right. Once confirmed in the Delete button, this *player* will be removed from the system.

Fig. 5.29: *Deleting a player from the rooms list*

Note: Removing a *player* causes the associated alarms to be deleted. The field *player* of the corresponding *external devices* will be empty as well.

Reboot a *player* in a room

This option, which is available clicking on the icon in the *players* list, allows a *player* to be rebooted. A success or error message will appear after confirmation clicking on the Reboot button, depending on the result of this command.

Fig. 5.30: *Rebooting a player from the rooms list*

Note: For the *player* to be properly rebooted, it is necessary that its "IP" field has been correctly filled in the corresponding *creation* or *edition* form.

Note: Reboot option does not apply to mobile type *players*, thus, it will disabled for them.

Switch off one *player* in a room

This option, available when pressing the icon in the *players* list, allows the user to completely switch off a *player*.

Fig. 5.31: *Switching off a player in the players list of a room*

Warning: This functionality is only available for LG players.

Turn a *player*'s panel off

This option, available when pressing the icon in the *players* list, allows the user to switch off the panel of a *player*, while the television is still on.

Fig. 5.32: *Switching off a player's panel in the players list of a room*

Warning: This functionality is only available for LG players.

Manage expenses in a room

To list and/or edit the *expenses* registered to a guest and room, click on the icon in the box corresponding to a room in the rooms list. On the right, the expenses of the guest exclusively in this room will be listed, allowing to consult the expense description, price, quantity, date and payment condition (marking an expense as paid in the system has only informative value).

Fig. 5.33: *Listing the guest expenses in a room*

In the expenses table, the last of the columns allows to edit and delete expenses in the list, as well as to create new expenses + New for this room and guest.

Note: As a guest can be registered in several rooms, when the user needs to list, edit or delete all the expenses of a guest in other rooms, the icon should be selected in all the rooms where the guest is registered.

Note: The currency considered for the prices in the administration tool can be configured in *"Configuration -> General settings"*.

Create expenses for a guest and room

To add an expense for a room and guest, click on the + New icon placed on top of the expenses list of the room where it will be registered. This expense will be associated as well to the guest in that room. The fields "Guest" and "Room" can not be edited in the form opened on the right side of the expenses list. The rest of the fields will modify the description, price and quantity of the expense, as well as if it has been paid or not. The "PMS concept"can be modified as well; this field is a brief identification for the expense to be traced within the PMS integrator records, if this is present.

Fig. 5.34: *Creating expenses of a guest in a room*

Note: The required fields in this form are the price and quantity, since the "Guest" and "Room" are not editable and will have the value of the guest and room where the new expense belongs.

Edit expenses of a guest and room

If the icon in the expenses table is clicked, the edition form will be opened on the right. In this panel, the user can change the room where this expense is registered (within the rooms the guest is staying), but not the guest who has made it. Besides, the expense description, the price and quantity, and the payment status can be modified. The "PMS concept"can be modified as well; this field is a brief identification for the expense to be traced within the PMS integrator records, if this is present.

Fig. 5.35: *Editing the expenses of a guest in a room*

Note: The required fields in this form are the price and quantity. The fields "Guest" (not editable) and "Room" will always have a default value in the form.

Note: If a new expense is registered to a wrong guest in the creation stage, it will be necessary to delete this expense and create a new one to correct this mistake, since the field "Guest" in an expense can not be edited.

Delete expenses of a guest and room

To delete an expense, just press in the expenses list the button of the entry to be removed. To confirm this action, click on Delete.

Fig. 5.36: *Deleting the expenses of a guest in a room*

Note: An expense that has not yet been paid can be deleted. This is allowed to correct errors without setting as paid any expense that had been associated to a wrong guest.

Manage messages for a room

To check and send messages to a given room (and sub-rooms, if any), the icon should be pressed in the corresponding room. A panel containing the messages currently sent to the room, and its sub-rooms, will appear on the right side. The guest may read them using the "Messages" service in the Arantia TV interface.

Fig. 5.37: *Display the messages of a room. Note that in room 103, which has two sub-rooms, the status of the message is displayed for each of them*

Create and send a message

To send a message to the *players* in a room (and sub-rooms, if any), click on the + New button placed on top of the messages list, to the right. Once pressed, the message creation and delivery form will appear on the right, containing three fields: subject, message text and save time (which will have the current time value as a default). Once the previous fields have been filled, just press on ✔ Send button to send the message, which will be from now on available in the Arantia TV interface for each of the *players* registered to that room (and any available sub-room).

Fig. 5.38: *Message creation and delivery form*

Note: "Subject" and "Save time" are mandatory fields in the form, although "Save time" would have a default value.

Note: The sender for every message from the tool will be "Hotel front desk".

Edit a message

To mark a message as read, press on the icon of the corresponding message. A new panel will be displayed on the right allowing just to set the message status from "Non read" to "Read". In this moment, if this was the only message for that room, the unread messages icon on the main menu will no longer be displayed, regardless the message had never been accessed or read by the guest. Anyway, the message and its content are still available accessing the "Messages" service.

Fig. 5.39: *Editing the status of a message in a room*

Note: The guests will mark the messages as read the first time they are accessed from the "Messages" service in the Arantia TV interface, only if the message was not already marked as read.

Delete a message

To delete a message from a room, either it is marked as read or not, the user shall click on the Delete icon of this message for the confirmation panel to be opened on the right. To permanently delete the message, press on the Delete button.

Fig. 5.40: *Deleting messages in a room*

Warning: Guests may as well delete any message from the Arantia TV interface, permanently removing these from the system. If this happens, it will not be possible to access them from the tool.

Manage the alarms in a room

This feature allows the *player* (except those defined as "Mobile" type) to be used as a wake-up alarm, turn it on at the desired time playing a specific TV channel.

To list the alarms registered in the *players* of a room (and all its sub-rooms), the user should click on the icon of the room box. This action will open on the right side a panel with the table of currently configured alarms for all the *players* in that room (and sub-rooms in case there are any), along with a + New button which allows to create new alarms.

Fig. 5.41: *Alarms panel in a room*

Create an alarm

To create a new wake-up alarm in a *player*, click on the + New button of the alarms list in the room where this *player* is installed. This will open the alarm creation form on the right side of the table.

Fig. 5.42: *Creating an alarm in a player*

In this panel, the following fields can be configured: date and time when the alarm should be triggered, *player* or *players* for which it will be set (*players* in the sub-rooms, in case there is any, will be listed as well), option to create it as enabled or not, the volume the TV or audio channel will be played, which TV or audio channel will be displayed when it plays: a TV channel and which days of the week it will play or it does just once.

Note: When an alarm without its "Repeat" field enabled is triggered in the Arantia TV interface, it will be still present disabled in the system, to make it easy for the guest to configure alarms with the same settings.

Edit an alarm

In the column "Actions", an alarm can be edited by clicking on the icon, opening a new form on the right side to edit the parameters of an alarm, like date and time for it to be triggered, the *players* where it will be set, if it is enabled or not, the volume of the TV or audio channel, and which content will be displayed when it plays: a TV channel, as well as if it will be active several days at the same time or just once.

Fig. 5.43: *Modifying alarms in a player*

Note: When an alarm is triggered in the Arantia TV interface, it will be still present disabled in the system, to make it easy for the guest to configure alarms with the same settings.

Delete an alarm

To delete an alarm, just click on the icon placed in the "Actions" field of the alarm list. This will open a confirmation panel on the right: the Delete button should be pressed to confirm this action.

Fig. 5.44: *Deleting alarms in a player*

Warning: When an alarm without the field "Repeat?" enabled is deleted, this alarm and all its replays will be removed from the system.

Consult and modify the guest in a room

If a room is occupied, on the top right-hand corner of the room box the name of the guest and the icon will be displayed. When clicking on them, the *guest edition* form opens, allowing the user to modify the genre, name and language of the guest.

Fig. 5.45: *Editing data of a guest*

Note: Changing the language of a guest in this form will modify the language of the *players* in all the rooms where this guest is registered.

Warning: The name of the guest can not be left blank. The language and genre will always have a default value in the form.

Manage the sub-rooms in a room

If there are sub-rooms in a given room, it is possible to list them clicking on the parent room number in the rooms table. The list of dependent rooms will be displayed as a new list of rooms. This view is the same as the list of all the registered rooms, except only the consult and edit icon of the *players* in each sub-room is available, as well as the to edit them.

Fig. 5.46: *Listing sub-rooms of a room*

Note: Consulting and editing sub-rooms is a recursive process, meaning that to list the sub-rooms in a sub-room its number should be clicked, in the case there are any sub-rooms registered.

Note: The edition form of a sub-room is identical to a *parent room form*, except these fields are not present: “First time in the room”, “Rooms group”, “Mobile code”, “Mobile devices limit” and “Location”. This settings will be inherited from the first level parent room (the room in the hierarchy without any parent).

6. Channels

Channels section, that can be found in the tool left side menu under section *"Rooms"*, allows the user to configure different settings related to the television or radio channels the IPTV provider is serving in a given Arantia TV installation. These channels can be grouped in different packages, letting the user to choose a category per genre or per rates. It is possible as well to define channel ordering, per channel number or guest language.

6.1 Packages

Using the first option in the drop-down menu ("Channels -> Packages"), the user can create, modify or delete channels packages defined under his own criteria. The image below shows some channels grouped as free or premium.

Fig. 6.1: *Table of Channel Packages in the tool*

In the table, packages logo and name are listed, and some actions can be done, as show the channels in each package ( ), edit its settings ( ) or delete some of them ( ).

View the channels of a package

For consulting which channels are included in a given package, the user should click on the icon, displaying a channel list on the right, corresponding to the selected package.

Fig. 6.2: *Lista de canales de un determinado paquete*

This list shows order and name of the channels, allowing as well to edit their configuration ( ) or remove them ( ).

Edit a channel from the channel list in a package

The panel opened on the right of the channels list of a package when pressing on the button of a channel is the same as the channel edition or creation form ("Channels -> Channels List -> *Edit channel* or *Create new channel*", respectively). In this form, several options are shown for edition, like channel order, name, protocol for the IPTV channels, IP address, port, channel logo, language, package, radio channel or not (only audio channels) and which rooms are allowed to play the channel, regardless if the contaning package is assigned to the rooms, or not. In the section covering *creation of a new channel* these fields are explained in detail.

Fig. 6.3: *Edición de un canal desde la lista de canales de un determinado paquete*

Note: In this form channel order, name and IP address are required.

Note: If there is any modification of the field "Rooms" in a channel form, the channel list of the *players* in the corresponding rooms will be updated, in real time, once the user has saved the changes.

Delete a channel from the channels list in a package

For this action to be performed, the icon, right to the , shall be pressed. This order must be confirmed clicking on the Delete button shown in the confirmation panel on the right.

Fig. 6.4: *Delete a channel from the channels list in a given package*

Warning: Deleting a channel in this section will remove the channel from the system. For removing a channel from a given package the "Channels" field in the package or the "Packages" field in the selected channel.

Create a new channel from the channels list in a package

To add a channel to the tool from the channels list of a package, just click on the

button on the right side of the channel creation form, and the fields described in the section *"Channels -> Channels List -> Create new channel* will appear.

Fig. 6.5: *Creating a channel from the channel list in a given package*

Note: Creating a channel in this section do not associate the channel to the package from which the creation form has been launched. To complete this action, it is necessary to assign the package in the "Package" field of the new channel creation form.

Edit a package

To edit the name, logo or channels in a package, as well as the rooms where it is available or its prices (if it is a premium package), click on the icon of such package in the packages list. Once pressed, the package edition form will be opened on the right side. This is the same form as *create new channels package*, and the fields are detailed in that section.

Fig. 6.6: *Package edition*

Note: In this form, package name and the channels included are required. It is not mandatory to assign a logo or a price, or associate any room.

Note: As the parent rooms (any room with some assigned sub-room) are not allowed to have any registered *player*, the channel packages assignment shall be done from these sub-rooms.

Warning: Whenever a channel is associated to a room selecting it in the "Channels" field, this channel will become a free channel for this room, regardless it belongs to a pay package or not. To configure a pay channel, this has to be included only and exclusively in one pay package, and this package has to be associated to the corresponding room in the field "Channels packages".

Delete a package

To delete a channles package, just click on the icon of the selected package and the confirmation panel will be opened on the right. To permanently delete it, press on the Delete button.

Fig. 6.7: *Deleting a package*

Note: Deleting a channels package will not remove from the system the channels included.

Warning: If a package with defined rates is deleted, meaning a pay package, and there is any room with this package assigned, the guest in this room will not be able to access the channels in this package anymore, no matter the expiration date of the rights acquired when the package was purchased.

Create a new package

To add packages to the system, click on the New button on top of the packages list. The form on the right side has the necessary fields to configure a package:

- Package name.
- This logo will be shown in the TV service of Arantia TV and will help the user to easily identify the package.

  Note: It is recommended to load square-shaped images for the logos to avoid distortion.

- Channels in the new package.
- Rooms with this package available to see if it is for free, or to purchase if it is a pay-per-view. This is the same action as entering *room edition form* and assign the desired packages.
- Rates, defining the pricing for a channel by duration and value, if this is a pay channel. For free packages, this field must be left blank, without selecting any fare.

To create the new package, just click on the Save button.

Fig. 6.8: *Package creation form*

Note: In this form, package name and the channels included are required. It is not mandatory to assign a logo or a price, or associate any room.

Warning: In the moment a channel is assigned to a room by selecting in the “Channels” field of the room panel, this channel is considered free of charge for this room, regardless it belongs to a pay package or not. To define a pay channel, this has to be included in one or more pay packages, and these packages shall be assigned to the corresponding room in the “Channel packages” field.

6.2 Channels list

When accessing the list of available channels in the left menu (“Channes -> Channel List”), a table with all the currently created channels will be shown. Within this list, all the channels information will be available (logo, order, name, protocol, IP address, port, language and package where it is included), as well as the possibility to edit or delete them.

Fig. 6.9: *Channels List in the tool*

Edit a channel

To edit the parameters of a channel, the icon should be presses. The same form as *create a new channel* will be opened on the right side. Several options can be edited in this form, like channel order, name, IPTV channel protocol, IP address, port, channel logo, language, package where it is included, radio or not (audio only channels) and which rooms will watch this channel, regardless if the package where it belongs is assigned to these rooms or not.

Fig. 6.10: *Editing a channel from the channels list*

Note: In this form channel order, name and IP address are required.

Note: As the parent rooms (any room with some assigned sub-room) are not allowed to have any registered *player*, the channel packages assignment shall be done from these sub-rooms.

Note: If the "Rooms" field is modified in a channel form, the channel list of the *players* in these rooms will be updated in real time, once the user has saved the changes.

Delete a channel

For this action to be performed, the icon, right to the , shall be pressed. This order must be confirmed clicking on the Delete button shown in the confirmation panel on the right.

Fig. 6.11: *Deleting a channel from the channel list*

On the top right side of the channel list, there are four buttons Delete selected, Export, Import and New. In this section, the user can create new channels, delete one or more at the same time, export and import a channel list, which will make it easier to add a large number of channels to the system.

Create a new channel

In the channels section, it is possible to create a new channel clicking on the New button. This action will open the channel creation form on the right, which has the following fields:

- Order: number indicating the position of a channel in the list of all existing channels in the system.
- Channel name.

- Protocol: if necessary for accessing the IPTV channel, it should be selected from a drop-down menu with RTP or UDP.
- Channel multicast address.
- Port for accessing the channel. It can be left blank if it is not necessary.
- Logo: consists on a data input field to select a file (must be an image) to graphically define a channel.

Note: To avoid distortion in the logos, it is recommended to upload square-shaped images, no matter the size.

- Language: describes a channel nationality.
- Package: if the new channel is supposed to be included in one or several channel packages, these should be selected in this moment.
- Radio: if this is an audio channel this field should be set to "Yes", otherwise select "No". If the channel content is not known in this moment, "Unknown" should be selected.
- Rooms: the new channel will be assigned here to one or more rooms. This same action can be done accessing the *edit room form* and selecting the channels for this/these room/s.

The image below shows the mentioned form.

Fig. 6.12: *Creation of a channel from the channels list*

Note: In this form channel order, name and IP address are required.

Note: If any of the "Rooms" are selected in this form, the channel list of the *players* in these rooms will be updated in real time, once the user has saved the changes.

Import channels

It is possible to add to the system a large number of channels at the same time, importing them from a .csv file with the required features for the proper creation of the channels:

1. Each row in the file (record) will define a channel, the separator character between fields must be ",".
2. The fields will be the following and should appear in this order:
   - Channel name.
   - Communication protocol to access the channel IP.
   - Channel multicast address.
   - Port for accessing the channel.
   - Path of the logo image to identify the channel. This field will only appear in an exported .csv file, with channels for which the logo has already been assigned in the channel *edition* or *creation* form. In case of importing several channels to an empty Arantia TV installation, it will not be possible to indicate this path, so the field should be blank for this case.
   - Main language of the channel (language *id*).
   - Channel order. It can be modified by an ordering based on the language of the channels. In the section *"Channels -> Languages list"* this functionality is described.
   - Package or packages the channel belongs to (packages *id*). If the channel belongs to several packages, their respective ids must be written in quotations and separated by commas. If the channel is present just in one package, it is not mandatory this package id to be written in quotations.
3. It is not mandatory to fill every field (some of them could be blank, as protocol, port or the package where it belongs), but parameter ordering should be respected as shown above.

The image below displays an exported .csv file with the channels in previous examples.

	A	B	C	D	E	F	G	H
1	BBC World News	udp	239.255.1.1	1234	logos/1_logo_1518007341.png	1	1	2,3
2	CNN	udp	239.255.1.2	1234	logos/2_logo_1518007378.png	1	2	2
3	Eurosport 2	udp	239.255.1.3	1234	logos/3_logo_1518007421.png	1	3	2
4	Rai 1	udp	239.255.1.4	1234	logos/4_logo_1518007501.png	1	4	2
5	RussiaToday	udp	239.255.1.5	1234	logos/5_logo_1518007532.png	1	5	2
6	Al-Jazeera	udp	239.255.1.6	1234	logos/6_logo_1518007572.png	1	6	2
7	RTL	udp	239.255.1.7	1234	logos/7_logo_1518007604.png	1	7	2
8	TV5Monde	udp	239.255.1.8	1234	logos/8_logo_1518007634.png	1	8	2
9	Bloomberg	udp	239.255.1.9	1234	logos/9_logo_1518007660.png	1	9	2
10	ZDF-HD	udp	239.255.1.10	1234	logos/10_logo_1518007690.png	1	10	2
11	Euronews	udp	239.255.1.11	1234	logos/11_logo_1518007718.png	1	11	2

Fig. 6.13: *.csv file example displayed in a spreadsheet*

```
BBC World News,udp,239.255.1.1,1234,logos/1_logo_1518007341.png,1,1,"2,3"
CNN,udp,239.255.1.2,1234,logos/2_logo_1518007378.png,1,2,"2,3"
Eurosport 2,udp,239.255.1.3,1234,logos/3_logo_1518007421.png,1,3,"2"
Rai 1,udp,239.255.1.4,1234,logos/4_logo_1518007501.png,1,4,"2"
RussiaToday,udp,239.255.1.5,1234,logos/5_logo_1518007532.png,1,5,"2"
Al-Jazeera,udp,239.255.1.6,1234,logos/6_logo_1518007572.png,1,6,"2"
RTL,udp,239.255.1.7,1234,logos/7_logo_1518007604.png,1,7,"2"
TV5Monde,udp,239.255.1.8,1234,logos/8_logo_1518007634.png,1,8,"2"
Bloomberg,udp,239.255.1.9,1234,logos/9_logo_1518007660.png,1,9,"2"
ZDF-HD,udp,239.255.1.10,1234,logos/10_logo_1518007690.png,1,10,"2"
Euronews,udp,239.255.1.11,1234,logos/11_logo_1518007718.png,1,11,"2"
```

Fig. 6.14: *.csv file example displayed in a text editor*

Note: The fields "Radio" and "Rooms" should be configured later in *channel edit form* for each channel, once the .csv file has been imported.

Warning: It is necessary that those elements specified by their ID (language and package) exist in the system with the corresponding ID, otherwise they will not be properly imported.

Export channels

Clicking on the

icon a .csv file will be downloaded in the browser containing the information of every channel registered in the tool, with the format described in the previous section.

6.3 Languages list

The third option under "Channels" on the left menu is "Lists of languages", which define the order the guest will see the channels in the TV service of Arantia TV. This order will be based on each list configuration, that is, the channels whose "Language" is configured with the first language of the list will be shown in first place; following those the channels with the language that had been placed in second position, etc. Several lists can be created, so the guests will see first the channels in their language.

Note that the channel ordering by language will not affect the channel numbers, they just will be displayed as per the configured language list. As a result, it is possible that channel 2 would appear before channel 1, if the corresponding language list orders the channels this way.

The lists are configured for one of the languages in the interface, meaning the guest would have a different list according to the language the interface had been configured (a guest would have his own language as the first in the list, followed by the language in the interface, for example). The image below shows the table of language lists which will appear in the tool when entering the section, with the name and language of the interface associated to each list.

Fig. 6.15: *Table of channel languages lists in the tool*

Note: The channels with the same language in their "language" field of *edit channle* and *create channel* forms will be ordered based on the "Order" in these forms.

Note: If there is no list for a given language, the guests (or *players*) with this assigned language will see the channels based on the order stablished by each channel's "Order" field. The same would happen no languages list has been created in the tool.

Note: Only one list per language will be allowed.

Edit a languages list

To edit the order of the languages in a list, just click on the icon on the right of each row in the table. Once pressed, the form for editing a list of languages will be opened on the right. This action will be performed in two steps: first, a name and a language for the associated interface should be selected; secondly, once the Continue button has been pressed, drag the language boxes and drop them in the desired position of the list.

Fig. 6.16: *Editting a list of languages in two steps (first on top, second step below)*

As shown in the image below, it is possible to create a list for English speaking guests in which the channels with this language configured as main will be appearing in first place in the channel list of the *players* in their rooms, for the current selected language (English).

Note: List name can not be left empty; language will have a value as a default. The same language will not be available to use in any other existing list.

Delete a languages list

To remove a list of languages, click on its icon. A panel will be opened on the right for confirmation. To permanently delete this list, press on the Delete button.

Fig. 6.17: *Deleting a languages list*

Create a languages list

To create a new list of languages, click on the + New button on top of the table of language lists. A form will be opened on the right to perform this action completing two steps:

- First of all, a name and a language for the list must be chosen.

> **Note:** List name can not be left empty; language will have a value as a default. The same language will not be available to use in any other existing list.

- After that, once the Continue button has been pressed, drag the language boxes and drop them in the desired position of the list, which will arrange the channel order for each guest based on the nationality.
- For applying these changes, the Update button shall be pressed.

Fig. 6.18: *Creating a list of languages in two steps (first on top, second step below)*

Channels are automatically reordered. When they are requested by the TV service of Arantia TV, the channels will be ordered based on the guest language (or on the *player*, regarding there is no guest registered in the room).

> **Note:** If there is no list for a given language, the guests (or *players*) with this language assigned will order the channels based on the "Order" field for each channel.

7. Media

This section, available in the left-side panel menu of the tool, allows to consult and manage the images and audios that would be used in any of the templates in the system, as information, guest welcome or *emergency* (that can be edited in *"Personalization -> Template designer"*).

7.1 Images

Images in the system produce a great visual impact for the guest, used in information, welcome or emergency templates. To list or manage all the available images that have been added to be used in the *templates designer*, enter the "Media -> Images" section in the left-side menu.

Fig. 7.1: *List with of images available in the system*

This list displays a thumbnail of each image, its name, a brief description, last modification date and the owner of the image. The element edit ( ) and delete ( ) buttons are located on the right.

Edit an image

To change an image settings click on the icon of this file. On the right-side, the edit form will appear, allowing the user to modify the file name, description and the image itself using the file upload tool.

Fig. 7.2: *Editing parameters of an image in the tool*

Note: "Name" filed can not be left blank in this form.

Delete an image

For deleting an image from the system, just click on the icon next to the icon in the list of images. A confirmation panel will be opened on the right side. For permanently deleting an image the Delete button should be pressed.

Fig. 7.3: *Deleting an image*

Warning: If the image being deleted is currently in use in a template, the system will not ask the user for confirmation and the image will be removed. Then, the templates involved will be available without any image. In case of emergency templates, a default template without any image will be displayed to inform the situation.

Add an image

For increasing the list of images available for templates creation, the user should click on the + New button located on top of the list. Once pressed, the form for image creation will be opened on the right side.

Fig. 7.4: *Adding an image for later use in a template*

This form is somewhat different from the rest of forms in the tool:

- The user can select in local folders the images to be added selecting them using the first field of the form. Dragging and dropping the images to be uploaded in the bottom box does the same action. In case several images to be added at the same time, the images list will be updated with as many images as files dropped.

> **Note:** Supported file types are: JPEG, BMP, SVG, TIFF, PNG and GIF.

- The progress bar informs about the images uploading status.

Once all the images for uploading are selected, a table will appear on top of the ✔ Done button. The user can check in this table the name these images will have in the tool and the uploading status, and delete those ones that will not be finally uploaded.

Fig. 7.5: *Table of uploaded images in the form for adding an image*

Note: When uploading an image to the tool, its name can not be modified. For editing, use the *edition form* of the image.

7.2 Audios

In the templates created with the *templates designer* to be displayed for information or welcome messages, or whenever an *emergency alarm* is triggered, the user can add different audios which will be played as long as the alarm is active. This sound will catch the guest attention in case of emergency. Access the "Media -> Audios" section to add and manage the registered audios , where an audio list with names, descriptions and other information is available, as well as the buttons to edit or delete these audios.

Besides, within this list the *Wakeup_alarm_audio* file is available, which will be played in a loop whenever a *wakeup alarm* sounds and there is no channel assigned to the room (for some *players*, this audio will be played in case the wakeup alarm would have been configured in a channel which is not available at the moment due to any transmission or reception error).

Fig. 7.6: *Table of available audios*

Edit audio

To edit an audio, press the icon of the selected audio to open the edit form on the right. Name, description can be modified, and an audio file can be uploaded to replace the existing.

Fig. 7.7: *Editing an audio in the tool*

Note: "Name" filed can not be left blank in this form.

Delete audio

To permanently delete one audio, press the icon for the confirmation panel to be displayed on the right.

Fig. 7.8: *Deleting an audio in the tool*

Warning: Deleting an audio assigned to the emergency alarm template, will produce that, in case an alarm is triggered, the guest will not hear any audio signalling this circumstance.

Add new audio

To add a new audio, click the button on the top-right corner of the audio list. Once pressed, the new audio creation form will be displayed on the right side.

Fig. 7.9: *Creating a new audio in the tool*

This form is similar to the one available for adding new images to the system:

- The user can select in local folders the audio to be added using the first field of the form. Dragging and dropping the audios to be uploaded in the bottom box does the same action. In case several files to be added at the same time, the audios list will be updated with as many audios as files dropped.

Note: Audio file formats supported: MP3, MP4, MKV, AVI y TS.

- Progress bar indicates the status of the uploading process for these audios.

Once all the audios to upload have been selected, a list will be displayed on top of the ✔ Done button. The name of the audios and the upload progress can be checked in this table, as well as delete those which will not be finally added.

Fig. 7.10: *Table of uploaded audios in the new audio form*

Note: The audio name can not be changed while it is being added to the system. To modify this name, the *edit form* for this audio shall be accessed.

8. Personalization

Using this section, the user is able to customize the visual layout of the Arantia TV interface, by creating and editing information or welcome templates, modifying the background and logos in the application, or editing the main menu services distribution and colours, as well as designing the templates for the *"Emergency alarm"* service, which include image and sound.

8.1 Logos and backgrounds (Styles)

Known as "Styles" in other forms (*"Rooms -> Rooms List -> Create new room"*), the logos and backgrounds that can be managed in this section will provide extra level of visual customization in the Arantia TV interface. Accessing from the side menu of the tool to "Personalization -> Logos and Backgrounds" a list of available styles will be shown.

Fig. 8.1: *List of customizable styles*

These styles are sets of logos and backgrounds which will be displayed in the interface the guest will see in the *player/s* of the room/s. The logo is placed in the top-left corner of the menu in the Arantia TV application for TVs and STBs, and on top in the mobile app. Whereas the background will only be displayed in the TVs and STBs interface whenever the room for a *player* has no available channels. In the mobile app, the background is placed behind the logo, on top of the screen.

Fig. 8.2: *Logo and background examples in the interfaces of Arantia TV (displayed in a STB at the top; in a smartphone at the bottom)*

In the list of styles, these can be edited ( ) or deleted ( ), as well as created with the + New button.

Warning: The default style can not be deleted, but it may be edited.

Edit a style

To modify the logo or backgroung of a style, as well as its name, just click on the icon for opening the styles edition form on the right side.

Fig. 8.3: *Editing a style*

In this form, there are only three fields: name of the style, logo and background. The last two fields allow to select a file (image) to be loaded to the system.

Note: It is recommended for the background images to use a size of 1280x720 pixels, or larger as long as the aspect ratio (16:9) is preserved. For the logos, images of any format can be loaded, with a maximum size of 640x480 pixels, and the interface will resize them to the available space on the top-left corner.

Delete a style

For deleting a style, the user should click on the icon of the corresponding style. This action shall be confirmed pressing on the Delete button in the confirmation panel on the right side.

Fig. 8.4: *Deleting a style*

Warning: The default style can not be deleted.

Warning: If a style assigned to any room is deleted, the first style available in the list will be applied to this room.

Create a new style

To add new styles to the tool, press on the + New button on top of the styles list for the creation panel to open on the right. This is the same as *styles edit form de estilos*. There are some fields in this form:

- Name of the style.
- Logo to be a part of the style, which will be always visible in the Arantia TV interface (except in the TV service when the programs guide is hidden).
- Style background, which will only appear in the TVs and STBs when there is no channel assigned to a room. In the mobile version of Arantia TV, it will be placed at the top of the screen.

Fig. 8.5: *Creating a style*

Note: Logo and background are required fields in this form.

9. Menu designer

In the "Personalization -> Menus" section of the left-side menu of the tool, the users will find the menu designer, which is a tool to create their own menus. The philosophy around this tool is flexibility and quickness. Following these steps, the users will be able to create an ad-hoc menu in real time, meaning they may configure a menu that is currently in use in existing rooms. The menu will be updated in the moment the guest opens the main menu of the interface.

Fig. 9.1: *Example of a menu designed in the tool*

9.1 Menu selection

This is the section of the tool where the user can select the existing menus, edit or delete them, or create new ones.

Fig. 9.2: *Screen for menu selection in the tool*

To **select a menu** just click on it and the edit screen will be opened.

To **delete a menu**, the user should click on the icon of the corresponding menu. The user must be sure this menu is not in use in any of the rooms, otherwise the designer will show an error message indicating this circumstance. To delete this menu it will be necessary to previously assign a different one to the corresponding rooms.

To **create a menu**, the user just have to click on the icon and introduce the name of the menu for each available language. When pressing "Continue" an empty initial menu structure will be created.

To **edit a menu**, click on the button of the corresponding menu, and some input fields will appear to modify its name in any of the languages configured to be available in the management tool.

Fig. 9.3: *Editing a menu from the selection screen*

Note: The default menu (*Default*) can not be deleted.

9.2 Menu editor

In this section, the menus can be modified to the user's liking with the tools available.

Fig. 9.4: *Screen for menu edition in the tool*

As shown in the image above, the menu designer has an area on top which is always visible and another one that would change based on the mode the user has selected.

In this fixed part, the user has:

- A button to return to the menu selection.
- Menu currently selected (position in the submenu tree).
- The buttons for selecting different modes, which consist of four different parts where all the properties in the menu can be modified.
- The name of the menu, next to the save button.

Possible modes for the designer are:

- **Structure:** the user can edit here the shape and position of the cells where the different services and widgets in the application will be placed. This option is not available in the menus with a default design.
- **Cells:** Elements where the services, submenus and widgets will be added. Their properties, like colour and shape, can be modified in this mode.
- **Translations:** In this mode the user will modify the names of the services in the supported languages.
- **Preview:** Last step where the final result and the navigation over this design can be checked.

Structure

Fig. 9.5: *Edition screen of menu structure*

The first step to create a menu is to design the desired shape for it. The initial structure available is a 2x2 cell set, meaning there are 2 rows and 2 columns.

Every empty cell in the menu will appear in an orange background with a in the center, where services, submenus or widgets can be added later.

In this section of the designer there are two tools available:

- **Divisions:** This includes 3, a horizontal, a vertical on top, and a second vertical on the bottom area of the menu. Using these divisions, the user could create separated sections in the menu which will provide different cell arrangements in each of the sections that have been created with the divisions. A division can be moved once it has been placed, this action is emphasised with blinking arrows. This allows the sections size to be modified.

Note: A division can not contain cells smaller than one unit of the 4x8 structure.

- **Organization:** Using this tool, the user can modify the cell arrangement within a section. A section is a part of the menu contained within the menu and divisions boundaries, which is selectable clicking on it. When a section is selected, the cells included will change their maximum size, according to the size of the selected section.

Cells

Fig. 9.6: *Edition panel of menu cells*

Once the user creates the designed structure, the user may proceed to add the services, submenus and widgets. The main functionalities in this step are either add elements to the menu or assign the desired style.

The user can modify both the background colour of the elements, or their shape, or even configure if they execute any action or it is just an informative element.

First step is to add the services, which is a simple task, just drag from the list of the available services on the right and drop them in the empty cells of the menu.

Note: Note that it is not necessary to fill all the cells with a service. If any of the cells is empty, this place will appear as an empty space, this can be confirmed in the preview mode.

Fig. 9.7: *Edition panel of services and widgets properties*

Once the services have been added, the user can select them to modify their properties. The properties for one, or more selected services can be simultaneously modified, regarding the size limits. If, at least, one service is selected, new panels will appear on the right:

- **Colour:** This panel shows the 4 properties of a service regarding the colour, which are: font and background colour when unselected, and font and background colour when selected.

- **Properties:** This will allow to modify the shape and the atributes of the service. The font and icon size, or the border radius, even creating a round service when reaching the limit value. Besides these properties, there are others like mobile view, indicating if this service will appear in the guest mobile app; and browsing, which configures the service to be or not to be selectable when the guest is browsing the menu.
- **Colour palette:** This tool will be available whenever there is any service available in the menu. If there is no service selected, the properties will be applied on all of them, otherwise, these will be applied on the selected, modifying the colours of the services with the tool predefined palettes.

To delete a service from the menu, the user has to move the mouse over it for the button to appear on the top left corner and click on it.

Besides the normal services included in the application, the designer allows the user to create new **customizable services**. These services have a template assigned that can be previously created in the template designer.

To add a new service, just drag the element **Custom Service** from the **Custom Services** list and drop it in a cell, like when adding normal services. Once dropped, a popup with this form will appear.

Fig. 9.8: *Popup to create a new Custom Service*

In this form, a name for each available language and a service description (Optional) shall be entered, and an icon and a template amongst the available selected. Once create is clicked, this new service will appear in the cell we had previously selected.

Custom services can be removed from their cells as any other service, placing them again in the services list. Besides, these services are exclusive for their menu, and can not be used in any other, so deleting the menu where they were created will delete these services from the system.

The user can as well modify these services clicking on the button selecting them or moving the mouse over while they are assigned to a cell.

Fig. 9.9: *Editing a Custom Service*

Or delete them placing the mouse over when they are in the “Custom Services” list.

Fig. 9.10: *Deleting a Custom Service*

Another element that can be added to the cells is a **menu**, which will behave as a **submenu** when accessed from the current menu. These can be added from the submenu list placed next to the rest of elements, which presents all the previously created menus that are not yet assigned to this menu.

The procedure to add and create them is the same as the custom services, with slight differences. As shown in the image, when creating a submenu, the popup will be similar, but with two missing fields, as this does not have a description or an assigned template.

Fig. 9.11: *Popup to create a new Submenu*

Once the menu has been added, creating a new one or dragging to a cell any of the existing, besides the button for edition, there is an additional button to browse the submenus tree. When pressing this button, the structure of the corresponding menu will be loaded. This is an agile way to navigate the menu tree and modify the complete structure without entering each menu individually.

Fig. 9.12: *Submenu element options*

This navigation is reflected on top of the menu, updating the menu path while the user is accessing the sub-menus so we are aware where this submenu is placed within the whole menu structure. These buttons can be used to quickly navigate the menu structure.

Fig. 9.13: *Navigating the submenu tree*

Note: The maximum submenu level is 3, as the menu designer will not allow to add submenus under this level that would create too big structures resulting in non intuitive menus.

Translations

Fig. 9.14: *Edition panel of menu elements names*

To translate the name of a service or a menu to a given language, just select the elements to be modified and they will appear on the right panel, where the user will be able to modify their names for the language selected on top, and preview this change in real time on the menu.

Warning: If the name or icon of a general service or menu is modified, it will change in all of the menus containing it.

Preview

Fig. 9.15: *Menu preview screen*

The last step shows how the created menu will be shown to the guest in the *players* and the mobile app, as an exact image of the result.

The user can select in this section if a background image or video will be used for the menu. The video is not editable, while the logos and backgrounds can be modified in the bottom panel. These logos and backgrounds can be created or deleted, but they are not assigned to the menu. If the user would like to do so, the section *"Personalization -> Logos and backgrounds"* should be used.

Note: The default logo and background can not be deleted (Default).

Además el usuario podrá seleccionar si quiere la previsualización del menú en el formato TV o en el formato móvil. En la vista de TV se puede navegar sobre el menú con las flechas del teclado, and access a submenu pressing *enter* key. To return to the previous menu, just press *backspace* key.

It is important to save the changes once the design has been finished, clicking on the Save button on the right top corner of the designer. When the user presses the button, it will turn into yellow while the information is being saved. When this process is complete, the button will turn back into green if the changes have been successfully saved, or red, denoting there has been a problem and these changes have not been saved.

Hint: All the sections of the tool can be browsed and the parameters changed in any moment. It is not mandatory to follow the order of the presented guide lines, but it is recommended.

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10. Template designer

The "Personalization -> Template designer" section in the left-side menu of the system is a tool where the users are able to design their own templates for the customizable services. These templates will apply only to those services created for this purpose. An example of these services is **Emergency alarm**, to which any of the templates created in this tool may be assigned.

Fig. 10.1: *Example of a template designed in the tool*

10.1 Template selection

This is the first screen after opening the designer, from the left-side menu section "Personalization -> Template designer". This panel is a selection menu that lists all the templates already created in the system. New templates can be created, selected to be modified, deleted or assigned to a custom service.

Fig. 10.2: *Template selection panel in the tool*

To **select a template**, just click on it and the editor will be launched.

To **delete a template**, press the corresponding icon of the template.

> **Warning:** When deleting a template that was assigned to a service, this service will not a any template, and the interface will display a default template when accessing the service. This default template will appear whenever the service is not assigned any other template or this is empty.

To **create a new template**, click on the box with the icon inside and enter the template name in the upcoming field. When clicking an empty template structure will be created and the edition panel will appear.

Note: The same template design can be assigned to several services at the same time.

10.2 Template editor

Within this editor panel it is possible to modify the different template designs with all the tools at your disposal.

Fig. 10.3: *Template edition screen in the tool*

As shown in the image above, the template editor is divided in two parts. On the left side, the template design preview is always available. On the right side, the user can find all the available tools.

In detail, on the left side, as the user's disposal:

- A back button (returns to template selection).
- Name of the current section (Structure, Cells, Background, Preview), in this case **Structure**.
- Template preview in the screen showing in real time the final result.

On the other hand, on the right side, the user can see:

- The name of the template the user is editing.
- The Save button to save any changes made.
- The mode selection buttons allowing to enter four different parts to modify all the properties in the template.

Possible modes for the designer are:

- **Structure:** the user can edit here the shape and position of the cells where the different elements of the template will be placed.
- **Cells:** Elements where the elements in the template will be added. Their properties can be modified in this mode as well.
- **Background:** In this mode the user will configure the background audio and media for the template background.
- **Preview:** Last step where the final result of the design can be checked.

Structure

Fig. 10.4: *Edition screen of template structure*

The first step to create a template is to design the desired shape for it. The initial structure available is a 1x1 cell set, meaning there is 1 row and 1 column.

Every empty cell in the menu will appear in an orange background with a in the center, where the elements can be added later.

In this section of the designer there are two tools available:

- **Divisions:** This includes 3, a horizontal, a vertical on top, and a second vertical on the bottom area of the menu. Using these divisions, the user could create separated sections in the menu which will provide different cell arrangements in each of the sections that have been created with the divisions. A division can be moved once it has been placed, this action is emphasised with blinking arrows. This allows the sections size to be modified.
- **Organization:** Using this tool, the user can modify the cell arrangement within a section. A section is a part of the template contained within the division boundaries, which is selectable clicking on it. When a section is selected, the cells included will change their maximum size, according to the size of the selected section. This is depicted in the image above, where the lower section is selected, with a maximum size 2x8 (2 rows by 8 columns), with 2x3 organization.

Note: A division can not contain cells smaller than one unit of the 4x8 structure.

Cells

Fig. 10.5: *Edition panel of template cells*

Once the designed structure is available, the user may proceed to add the images and texts. The main functionalities in this step are either add elements to the template or assign the desired style. The user can modify the background colour of the cells, their shape or the text size.

The first step in this section is to add the desired elements, dragging the media contents from the list on the right to the empty cells in the template. When an element is dropped in any designed cell, it will fit inside, adjusting shape and size to the cell. Once an element is assigned to a cell, it is possible to remove this clicking on the , on the top-left corner of the cell.

Note: Note that it is not necessary to fill all the cells. If any of the cells is empty, this place will appear as an empty space.

Fig. 10.6: *Edition panel of cell elements properties*

Once the user has added the elements, these can be selected to modify their properties. One or more can be selected to modify all their properties at the same time. To select one element, just click on it. To add new elements to the selection just click on the desired ones. To select all the elements in the template, click on the Select All button under Save button. To remove one element from the selection press again over it, or click on the Deselect button placed under Save.

When at least one element is selected, another properties panel appears on the right, where the can edit the font size of the texts, the background colour (or transparent) and the border radius of the cell, and select if the aspect ratio of the images has to be preserved.

To remove one element from the template, as mentioned above, just click on the in the element cell, or press the ✖ Remove button while editing the properties of this element.

Fig. 10.7: *Image edition panel*

Besides, in the template designer, new images can be uploaded, modify their properties or delete them from the system. This feature simplifies the design process, as shown in the image above.

Fig. 10.8: *Text edition screen*

The same applies to the texts to be added to the template, new texts can be created in the designer, the existing ones can be modified or deleted. Besides, in the bottom-right corner, the language for the text input can be selected amongst the available languages in the tool. This way, the text can be created for any of the available languages, added to the template, allowing to use a single design for several languages.

To save the changes during the text edition or creation, click on the Save button, or **|cancel|** button to discard these changes and return to the previous screen. Both buttons are placed on the top-right corner of the text editor.

Fig. 10.9: *Text selection screen*

As mentioned above, a text translated to any of the available languages can be added selecting the desired language button (as an example, the Spanish button es | Spanish), placed to the right of the creation, edition or delete button. When a language is selected, all the texts in the list below will change to the selected language, and the texts already assigned in the template will as well be updated in the preview.

Note: The images in these lists can be as well managed in the *"Media -> Images"* section.

Background

Fig. 10.10: *Template Background edition panel*

Background mode allows to modify any element that would be used as a template background, as well as audios, images or channels.

The first section is **Header/Footer**, which allows the user to select if the Header and Footer are visible or not. This is very useful to create templates where the whole content should be at sight.

Below, **Background Sounds** section, where all the audios uploaded to the system (in *"Media -> Audios"* section) are listed. The audio to be played as background sound in the template can be selected from this list. If no audio is required, just press on the selected audio for this to be deselected. Next to each of the audios, there are two buttons, ▶ and ■, to play or stop this audio and identify which is the sound.

Besides, it is possible to link several background audios together that will be played in a loop when selecting more than one. The playlist order is defined by the selection order, as the number placed to the left of each selected track indicates.

Fig. 10.11: *Selecting several background audios*

After this section, the user can access the **Background Contents** panel, where it is possible to select the contents to be played in the screen background. Amongst the available categories (Images, Channels), only one of the types can be selected at the same time, but allowing to select several items of each category and configure the time interval to conform an infinite loop.

In the image below, there is an example with 3 channels configured with a 20 seconds time interval.

Fig. 10.12: *Selecting several background channels with time interval*

Selecting any kind of media with audio (Channels) will override the selection of any kind of background audio that could be configured. A warning message over the audios panel will indicate this circumstance.

Fig. 10.13: *Message warning of disabled sounds*

Preview

Fig. 10.14: *TV template preview screen*

The last step shows how the created templated will be shown to the guest in the *players* and the mobile app. The user can select if the preview shows TV or mobile format, using the buttons located under Save.

As shown in the image below, the elements in the template cover the 100% width in mobile view with vertical scroll to display the whole content.

Fig. 10.15: *Mobile template preview screen*

This section

Note: If the channels are not available, the only content displayed would be the corresponding logo.

A button to activate or deactivate the sound in the preview is available as well. This selection is not affecting the real functionality in the players.

It is important to save the changes once the template design has been finished, clicking on the Save button on the right top corner of the designer. When the user presses the button, it will turn into yellow while the information is being saved. When this process is complete, the button will turn back into green if the changes have been successfully saved, or red, denoting there has been a problem and these changes have not been saved.

Hint: All the sections of the tool can be browsed and the parameters changed in any moment. It is not mandatory to follow the order of the presented guide lines, but it is recommended.

11. Statistics

This section has been designed for the user to check the expenses of the current registered guests in the system, as well as to consult or export all the statistics reports and logs the tool may generate.

11.1 Expenses

As seen in section *"Rooms ->Room list -> Guest expenses"*, the expenses a guest has made during his stay can be managed using this tool. Within this section, which can be accessed from "Statistics -> Expenses" in the side bar menu, all the expenses registered in the system can be accessed.

Fig. 11.1: *List of all the expenses registered in the system*

As shown in the image above, in the expenses list it is possible to consult which guest has made it, a brief description, price, quantity, order date and payment. Expenses can only be consulted or deleted (clicking the icon for each entry) in this section. To add new expenses or edit the existing, the expenses per guest in the room section should be accessed (*"Rooms -> Room List -> List and Modify guest expenses"*).

Note: The currency selected for pricing in the management tool can be modified in *"Configuration -> General Settings"*.

Delete an expense

As in *delete expense* from the section where *guest rooms* are listed, this action is made in the same way. For deleting an expense, just select the button of the entry you wish to remove. To confirm this action, click on Delete.

Fig. 11.2: *Delete guest expense*

Note: An expense that has not yet been paid can be deleted. This allows to correct errors without assigning any payment to a wrong guest, since "Guest" field can not be modified from *edit expenses*.

11.2 User statistics

In this section of the tool, which can be accessed in the left-hand side menu on "Statistics -> User statistics", the user can export an XSLX file containing information about the services the guests have used within the period defined in the "From" and "To" fields of the form, as shown in the image below.

Fig. 11.3: *Statistics preview in the tool*

Thus, the user can generate and download a file with the individual accesses (number of visits to a service, TV channel or content) and the duration (number of hours a service, channel or content has been displayed) for the required rooms. These can be defined in the *"Statistics -> Rooms report"* section. This XLSX file will list as well statistics regarding language change and guest data clearance (account credentials). An image with a brief example of this file is shown below.

Date	Room#	Room Name	Unique Take Channel15-CNN	Unique Take Menu	Unique Take Movies	Total Services and Channels Watched during stay	Hours Watched Channel15-CNN	Hours Watched Menu	Hours Watched Movies	Total Hours of Use during stay	Language Selection
2018-08-02T12:00:00Z	555555	Room Nemesis	21	18	16	55	0.24	0.79	0.399	1.745	English
2018-08-02T12:00:00Z	111111	Room Test STB-5500	0	0	0	0	0	0	0	0	
2018-08-02T12:00:00Z	101	Room 101	0	0	0	0	0	0	0	0	
2018-08-02T12:00:00Z	2	Second Room	0	0	0	0	0	0	0	0	
2018-08-02T12:00:00Z	123	Room 123	0	0	0	0	0	0	0	0	

Fig. 11.4: *Exported statistics report example*

11.3 Email addresses to report

In this section, that can be accessed in the left-side menu under "Statistics -> Report email addresses", the user can configure the email addresses list where the *Arantia TV usage statistics* will be sent. In the edit form for this section, both time and frequency of this report can be customized.

Fig. 11.5: *Statistics report email sending form*

These are the fields of the form:

- Emails: the email addresses where the statistics report attachment will be sent shall be entered in this field. To save the changes, press the Save Changes button below.
- CCed email addresses: list including all the email addresses that will appear as "carbon copy" in the email where the statistics report will be attached. These changes will be saved in the system when the Save Changes button is pressed.
- When?: field defining the frequency this email will be sent: weekly, daily or at this moment.
  - When selecting "Weekly", the fields below will define a time and a day to send the report email. This will be the moment, day and time, when an email will be sent to the registered addresses. The report attached in this email will display the statistics corresponding to the last week usage, starting at the point the last week report was sent.

    Note: In case this is the first time the email is sent, the statistics report will include anyways the last seven days information.

  - If "Daily" is selected, only the time will be configured in the bellow field. This will be the time when the daily report will be sent to the addressees introduced. The attached report will show statistics for the last day, since the last email was sent.

Note: In case this is the first time this email is sent, only the previous twenty four hour information will be reported in the file.

- When "now" is selected, the fields "Time" and "Day" are replaced by "From" and "To", as well as Send an email now button is replacing !save-changes| button. These new fields shall be filled the same way as those in the *"Statistics -> User statistics"* section form. If the Send an email now button is pressed, the attached report will include statistics for a period between the date selected in "From" and "To" fields.

Fig. 11.6: *New fields when selecting "Now" in the form*

Warning: The Send an email now button does not save the changes made to the "email addresses" and "Cc email addresses" fields, but sends the report email to the defined addresses. To save this modification the Save Changes button, which is only available when configuring a periodic email sending, shall be pressed.

11.4 Rooms in report

In the "Statistics -> Rooms reported" section on the left-side menu, the user is allowed to select or deselect the rooms which will be included in the statistical data collection to elaborate the usage report of Arantia TV. To save these changes, the Save Changes button must be pressed.

Fig. 11.7: *Form of rooms to be included in the statistics report*

Note: Selecting and deselecting a room in this section has the same effect as enabling or disabling the option "Include in the statistics report" in the *room edit* or *create new room* forms.

11.5 Package report

In this section of the tool, that can be accessed in the left-side menu of the tool in "Statistics -> Packages report", where the user can list a briefing of the purchases of the currently defined pay packages in the system (*"Channels -> Packages"*). This table groups the purchases by unitary price, listing in the third column the times the pay per view rights have been acquired at that price. Besides, the percentage and unitary price per package over the total is available, as well as the total amount.

Fig. 11.8: *Pay packages report in the tool*

In the last column of this list, pressing "Details", each of these rows can be broken down by purchases in a new table. In this table the user can check the room where this purchase has been done, as well as the date.

Fig. 11.9: *Information detailed in the pay packages report*

Besides, on the top-right corner of the list (general and details), there is an Export button which allows the user to download a .csv file containing the corresponding table.

Name	Unit Price	Times purchased	Percent on purchases	Total Price
Premium Channels	4	3	50%	12
Premium Channels	5	1	16.7%	5
Premium Channels	1	2	33.3%	2
Total		6	100%	19

Fig. 11.10: *Example of an exported pay packages report file*

11.6 Alarm logs

In this section on the left-side menu of the management tool in “Statistics -> Alarm logs”, the user can access a table containing every activation and deactivation (both manual and automatic) of the *alarm monitors*. This will list the name and MAC addresses of these monitors, the date and type of activation/deactivation, as well as the total time the alarm was active.

Fig. 11.11: *Alarm logs in the tool*

On the top-right corner of the list, there is also available an Export button to download a .csv file containing the corresponding logs.

Monitor name	Monitor mac	Activation datetime	Deactivation datetime	Activation type	Deactivation type	Active time (seconds)
Monitor test	a4:b1:21:02:00:07	2018-10-01T12:45:55.181011Z	2018-10-01T12:49:35.570330Z	manual	manual	220
Monitor test	a4:b1:21:02:00:07	2018-10-01T12:49:49.040295Z	2018-10-01T12:59:46.776046Z	manual	manual	597
Monitor test	a4:b1:21:02:00:07	2018-10-01T13:00:07.149341Z	2018-10-01T13:00:16.107931Z	manual	manual	8
Monitor test	a4:b1:21:02:00:07	2018-10-01T13:00:43.511903Z	2018-10-01T13:01:19.077600Z	manual	manual	35
Monitor test	a4:b1:21:02:00:07	2018-10-01T13:01:22.468666Z	2018-10-01T13:01:42.354333Z	manual	manual	19

Fig. 11.12: *Exported alarms log example*

12. Services

This section of the tool will treat everything regarding all the available applications and services for the guest in the Arantia TV interface. Integration with any external service the application may have will managed here as well.

12.1 List of services

In this section of "Services", which can be accessed in the left side menu of the tool ("Services -> List of services"), the user can consult or edit the services Arantia TV is offering to the guests in the main menu. The following image shows the list of currently available services in Arantia TV:

Fig. 12.1: *List of available services in ArantiaTV*

Each of these services intend to provide the guests with an activity or utility that they might enjoy any time during their stay:

- Television: through this service, the guest will access to the IPTV channels being provided in the installation, enjoying free or premium content, as well as to the channel guide information.
- Mirroring: using this service, the guests will see in the television screen whatever they are watching in their smartphone or tablet.
- Casting: this service allows the guest to play contents from his own mobile device using apps for sharing multimedia content (as may be Netflix, Google Music, etc...). This functionality depends entirely on the *players* capacity, as well as the *external devices* registered in the tool and connected to the external ports of the *players* (Chromecast, AirPlay, …).
- Connect my device: using this feature, combined with the Arantia TV mobile app, the guests will be able to connect their smartphone or tablet to access the services in the interface, or to control them using the mobile remote functionality of the app.
- Alarm clock: with this service, the *player* (either television, or smartphone or tablet) can be used to create alarms which will make one or several TVs in the guest's room to switch on the chosen channel.

- TV Apps: through this service, other apps (installed in the *player*), like YouTube, Spotify, Google Maps os Games, can be launched, and handled using the remote.
- Settings / Languages: entering the settings, the guest will be able to change the language of the Arantia TV interface.

> **Note:** In this version of Arantia TV, when entering the settings, the "Languages" service will be launched for changing the interface language. In upcoming releases, other settings will be added to this section (like parental control code or television automatic switch off).

- Hotel information: this informative service provides the guest with all the data the user would be sending, whatever the subject (hotel installations, touristic information, etc). The contents to be shown in this service can be created, edited or deleted in *"Personalization -> Templates"*.
- Weather widget: this widget is located in the main menu showing meteorological information of the city that has been selected in *"Widgets -> Weather"*. It provides as well a 3-day forecast.
- Weather service: when accessing this service, a list of cities and their weather are presented to the user. Such list can be modified from *"Hotel -> Weather Cities"*. The included meteorological information is comprised by the current weather (i.e. clear, rain), current temperature, and maximum and minimum temperature for that day, humidity, and preassure. In addition to this information, a 3-day forecast is provided.
- Check out express: thanks to this service, the guest will be able to *check out* from the room of the *player* used to access the service, as long as the are no pending expenses. Just after this check out has been completed, the system will proceed to automatically reboot all the *players* in this room (and sub-rooms, if any), and clear all the user (guest) credentials that those *players* might have stored.
- View bill: the guest can consult *the expenses* currently registered to the room using this service, as well as the total amount.
- Emergency alarm: this service is not available in the main menu of the interface, but it will be triggered whenever the alarm monitor in the area of the room detects an emergency situation. This service shows an image to the guest, as well as playing an audio in the *player*, for the guest to be aware of the emergency situation. This template (image + audio) can be customized in *"Personalization -> Template designer"*.
- Welcome screen: this service is not available in the main menu of the interface, but is required to display the welcome message for the *guest*, if it is active.
- Channel guide: this service allows to consult at a glance the next 3-day program schedule for all the channels assigned to the room.

Hint: Differences between Casting and Mirroring:

	Casting	Mirroring
Description	It allows you to play a device's content in a different device.	It copies a device's screen, to replay exactly the same in a different one.
Screen	Both screens showing different content.	Both screens show exactly the same content.
Content	Only the content to be played will be shown.	The screen content in the first device will appear in the secondary.
Multitask	The main device can be used meanwhile for other tasks.	Whatever is taking place in the primary device will be visible in the secondary. No multi-task allowed.
Screen lock	The screen in the main device can be in suspension while the secondary device plays the content.	If the screen in the main device is off, the secondary device will show no image.
Applications	Casting is only supported for some applications.	Mirroring allows to share content from a majority of applications.
Local content	Generally, the local content from the main device can not be played.	It supports local content, like photos or videos stored in the primary device.

Warning: In this section only consulting or editing the default services is supported. Services can not be created nor deleted.

Edit a service

To edit a pre-installed service, just click on the located right to each service name. This action will open on the right the service edition form, which has the following fields:

- Language tab: selecting a language with these tabs, the used can edit the name and description of any service for each available language in the tool.
- Name of service: it will appear, accordingly translated, in the interface the guest will see in the *players*.
- Description: short text briefly defining the service functionalities.
- Show only if any of these *external devices* are available: the user would select in this field the types of *external devices* which, in case of any of this type is registered to a given *player*, will cause the service to be shown in the interface menu for such *player*. Otherwise, the menu for this *player* will not show this service.
- Show only for this *player* types: as is the case with the previous option, when selecting here a *player* type, this service will only appear in this type of *players*.
- Show only if room is occupied: this field must be selected for services that should be available only when there is a guest registered in the room.

Fig. 12.2: *Services edition form*

12.2 OTT applications

In Arantia TV, within the TV Applications service, the guests may enjoy all the OTT[1] applications installed in the *player/s* of their room/s. These applications can be registered and managed in the section "Services -> OTT Applications" in the left side menu of the tool. Once in this section, the list of registered OTT applications is opened:

Fig. 12.3: *List of registered applications in the tool*

[1] An OTT (*Over-The-Top*) application is a service or application providing a product through internet, avoiding traditional distribution. Generally, these services or applications a related to media and communication, and usually have a lower cost than the traditional delivery. Examples of these services or applications are "Netflix" which replaces the traditional provider for TV content, or "Skype" replacing the telecommunication provider.

In this section, the user can consult *the existing applications in the players*, edit some of their configurations, delete them or add new accesses to applications installed in the *players* for the guests to access them through the Arantia TV interface. To control which of these applications a guest can access through the TV Applications service in the interface, the applications to be shown in a particular *player* type should be configured in *"Hotel -> Player Types -> Edit a player type"* (for example, the user can configure this way that a *player* of a given manufacturer would not show the applications of a different brand).

Edit an OTT application

To edit the register of an OTT application in the tool, just click on the icon for the application edit form to appear on the right. There are four informative fields in the form which will be translated into each of the interface languages, so the language tabs are as well available in this form. These informative fields are: a brief header, application description body, extended information, and legal information. Other fields in the form are application ID, name, icons for representing it in the TV Applications section of the interface.

Fig. 12.4: *Applications edition form*

Note: The guest will not see any of the commented informative fields but the header, which will appear in the interface as the application name.

Delete an OTT application

To delete the reference to an OTT application in the tool, just click on the icon of the application to be deleted. This action will open a confirmation panel on the right. To permanently delete the application register, the Delete button should be pressed.

Fig. 12.5: *Deleting an application from the tool*

Note: Deleting an OTT application from the tool does not uninstall this application in the *players*, but disables the guest to access it using the Arantia TV interface.

Note: If it is required that, for a given type of *player*, the Arantia TV interface do not show an application to the guests, it is not mandatory to remove it form the system. Deleting the association of the application with such *player* in *"Hotel -> Player type -> Edit"*.

Add an OTT application

To register new OTT applications in the system, press on the New icon on top of the OTT applications list, right to the Delete selected button, for opening on the right the OTT application register form:

Fig. 12.6: *Application register form*

The fields within this form are:

- Language tab: in the same way as *edit service form*, using these tabs to select a language the user will be able to edit some of the fields in the form according to the available languages in the tool, as well as the guests will access the information in the language configured in the Arantia TV interface. These fields are the following four texts.
- Header text, body text, secondary information text and legal information text: these descriptions will be displayed in the Arantia TV interface, being header text the name of the application the guest will see in the TV Applications service. These fields can be translated into each language using the language tabs of the form.
- OTT application ID: this *id* is necessary for launching the application properly. This is a code the *player* will interpret to open the application so the guest can access and enjoy it.

  Note: Please, contact Televes to obtain the code (ID) for the applications to be added.

- Name: name of the application to register in the tool.

  Note: This field is only used as a reference of the application which is currently being registered or edited in the tool. The guest will not see this field in the interface. The field to be shown as application name in the interface is "Header text".

- Icons: these are two fields requesting the user to select two icons for depicting the application in the Arantia TV interface.

  Note: The current version of the interface will only make use of the field "Left Icon", but both are required in the form.

Note: Required fields in this form are "Name" and the two fields corresponding to the application icons.

List of OTT applications in Arantia TV

A list of available OTT applications for the Arantia TV compatible *players* is shown below.

Warning: This list may vary depending on the *player* model for each of the included brands.

Note: Using *the creation form of an OTT application*, it is possible to add new applications to the tool (these should be previously installed in each television). To add them properly for the guest to be able to use them, it is mandatory to insert the code (ID) for each application to be installed. Contact Televes to obtain the code (ID) for the applications to be added.

LG	
Applications available in the tool and pre-installed in the *players*:	
• Photo & Video • Music • Bluetooth Sound Sync • Screen Share • Mobile Connector • PC Connector • External Connector • Web Browser • YouTube • Arirang TV • NPO • Filmbox Live • Demand5 • All 4	• Deezer • Google Maps • AccuWeather 2.0 • Euronews • TV Hockey • Tanks • Gravity Ball • Mainstream • BBC iPlayer • BBC Sport • BBC News • STV Player • UKTV Play

Samsung	
Applications available for installation from SmartHub in the televisions:	Apps available in the tool:
• Dailymotion • Filmbox Live • YouTube • Plex • BBC News • Wiener Staatsoper • Red Bull TV • Airtime • LaOla1 • Euronews • AccuWeather • The Weather Network • Panorama TV • Swissinfo.ch	• YouTube • AccuWeather • Web Browser • Airtime • Plex • Euronews • BBC News • Red Bull TV • Mirroring

Hint: It is recommended to read the section "Samsung *Players* -> OTT Apps instalación" in the Arantia TV Technical Handbook to learn how to install applications in Samsung televisions.

Arantia players
Applications available in the tool and pre-installed in the *players*:
• YouTube

13. Widgets

Within this section the user will be able to manage everything related to the widgets that can be added to the main menu of the Arantia TV interface . For now, users can only add a widget with meteorological information of the required city.

13.1 Weather widget

In the left side menu of the tool, accessing “Widgets -> Weather”, the user can find a table with the weather widget currently registered, f any, with the city for which the information will be showed and the units the temperature will be displayed in the widget (Celsius or Fahrenheit degrees).

Fig. 13.1: *Weather widgets list*

It is possible for the widget to edit the city to be displayed, as well as remove it from the tool. Only one weather widget can be registered.

Note: The same widget will be displayed in the main menu for all the registered *players*.

Fig. 13.2: *Weather widget example in main menu*

Edit a weather widget

For editing the city showed in a widget or the units for the temperature data, just click on the icon of the widget the user wants to modify. This action will open a simple form on the right side of the screen, where the

city to be showed in the widget can be selected from a list of cities (configurable in *"Hotel -> Weather cities"*) or the units for displaying the temperature in the widget.

Fig. 13.3: *Edit form for the weather widgets*

Note: Widget city name is mandatory in this form, while one option for the unit will always be selected.

Delete a weather widget

For deleting a weather widget, just click on the icon of the widget. This will open a confirmation panel on the right. To permanently delete this widget the Delete button should be clicked.

Fig. 13.4: *Deleting a weather widget*

Warning: Removing the widget from the tool is possible, but as a result the widget in the main menu of the interface will not display any weather information. To hide the weather widget in the main menu, modify

the service cells arrangement in the section *"Personalization -> Menus"*.

Add a weather widget

To add a new widget to the system, no other widget should be registered. If this condition applies, pressing the + New button on top right-hand of the widgets table will open on the right side the widget creation form, as shown in the image below:

Fig. 13.5: *Creation form for the weather widgets*

There are only two fields in this form. First of them allows to select the city for which the weather information will be shown. This selectable field shows the cities that have been added to the tool in the section *"Hotel -> Weather cities"*. Second field is another selectable field for the units the temperature information will be shown: degrees Celsius or Fahrenheit.

14. Hotel

In this section of the tool, the user can manage all the general settings regarding the *rooms*, the *players*, the *external devices* or the languages in the application, as well as the cities for the weather widget or the pricing for pay elements.

14.1 Room types

In this section, which can be accessed in "Hotel -> Room types" on the left side menu of the tool, the user can create the labels for the room types which will be used in their *edition* or *creation* forms. These labels don't have any preestablished norm, so the room types can be chosen based on the user's criteria. Some examples could be: Bedroom, Suite, Hall, etc, as shown in the image below:

Fig. 14.1: *Room types list*

Like some other elements in the tool, in this section room types can be created, edited or deleted.

Edit a room type

To edit a existing type, click on the icon of the selected room type to open a form for editing the room types on the right. This form consists of a single field: name of the room type.

Fig. 14.2: *Edit form of a room type*

Note: The "Name" field in the form can not be left blank.

Delete a room type

To delete a room type, just click on the icon of the type to be deleted. This will open on the right the confirmation form to permanently remove this type pressing the Delete button.

Fig. 14.3: *Deleting room types*

Note: Deleting a room type which were selected for one or more room will cause these rooms to be left without any room type.

Create a new room type

To add a new room type to the system, click on the + New icon on top of the room types list. Once clicked, the creation form for room types will appear on the right side, consisting on a single field: room type name.

Fig. 14.4: *Form to create a room type*

Note: The "Name" field in the form can not be left blank.

14.2 *Player* types

Warning: To add a new player to Arantia TV, it should be validated to ensure compatibility with the platform. Proper operation of the player can not be assured for those models added without completing this procedure.

In the section "Hotel -> *Player* types", available in the left side menu, the user can list all the *player* types that have been created in the tool. These types are grouping basically the *players* under the same manufacturer and model. Besides, in this menu the *OTT apps* to be shown in a particular *player* type can be associated and removed by the user.

Fig. 14.5: *Player types list*

In this section the name of the existing *player* types can be consulted, as well as, delete them or create a new one, if necessary.

Edit a *player* type

Clicking on the right to the name of a certain *player* type, the *players* edition form will appear on the side, where the user can modify the type name, the manufacturer, the model, the OTT apps that will appear in the Arantia TV interface for all the *players* of this kind. These fields are explained in detail in the section *Create a new player type*.

Fig. 14.6: *Edition form of a player type*

Note: "Name" and "Manufacturer" are required fields in this form. The model must be unique in the system.

Delete a *player* type

To delete a *player* type from the system, just click on the icon of the type to be removed. This action will open on the right the confirmation panel. To permanently delete this type, the Delete icon has to be pressed.

Fig. 14.7: *Deleting a player type*

Warning: When a *player* type is deleted, all the *players* which had this type will be associated to the first *player* type in the list.

Warning: The "Mobile" *player* type can not be deleted.

Create a new *player* type

To add a new *player* type to the system, the user should press on the New button placed on the top right-hand area of the *player* types list. This will open a form to fill some fields:

- *Player* type name.
- *Player* manufacturer of the new type.
- *Players* model.
- *OTT apps*: in this field the user selects which of the apps will appear in all the *players* of the type that is being created.

Fig. 14.8: *Creation form of a player type*

Note: "Name" and "Manufacturer" are required fields in this form. The model must be unique in the system.

14.3 Display types

In this section, which can be accessed in "Hotel -> Display types" on the left side menu, the user can create, delete or edit the labels that might be associated to the *players* in their *edition* or *creation* forms. These labels have been designed to use in the system for mobile *players* only: to define their operating system (Android, iOS, etc).

Fig. 14.9: *Display types list*

Edit a display type

To edit the existing labels, just click on the corresponding icon for the edition form of display types to open on the right. This is a very simple form, containing a single field: display type description. As mentioned above,

this field is intended to be used as an informative label for mobile *players*, as a registration of their operating system.

Fig. 14.10: *Edition form of a display type*

Note: "Description" field can not be left blank in this form.

Delete a display type

As for the rest of the types in the section "Hotel", the users just needs to press the button on the right to delete an element from the system. This will open on the right side the confirmation panel. To permanently remove the display type, click on the Delete button.

Fig. 14.11: *Deleting a display type*

Note: Deleting a display type which was assigned to one or more *players* will remove this option from all of

them.

Create a new display type

To add a display type to the system, click on the + New icon on the top right-hand area of the display types list. This action will open a form with a single field to fill, a description of the display type. As mentioned above, this field has been defined to be used as an informative label for the mobile type *players*, so their operating system is registered.

Fig. 14.12: *Creation form of a display type*

Note: "Description" field can not be left blank in this form.

14.4 *External devices* types

In the section "Hotel -> *External devices* types", available in the left side menu, the user can list all the *external devices* types that have been created in the tool. These types are grouping basically the *external devices* with the same instructions to connect them. Assigning these types in the *external devices edition* and *creation* form is recommended, and is useful for the Arantia TV to be able to know which is the device the guest will be using and show the corresponding instructions when the "Casting" service is accessed in the main menu.

In this section the name of the existing *external devices* types can be listed, edited, deleted or created, if necessary.

Fig. 14.13: *List of external devices types*

Hint: It is recommended to use a generic *external device* type for those devices that just need a source switch to be used, without any further instructions. This type is already in the system, with the name "HDMI".

Edit an *external device* type

When clicking on the on the right side of a certain *external device* type, the edition form will appear on the right side, allowing the user to modify the type name. The rest of fields in this form are not used in this version of Arantia TV.

Fig. 14.14: *Edition form of an external device type*

Note: The "Type name" is the only required field in this form.

Delete an *external device* type

To delete an *external device* type from the tool, click on the icon of the type to be deleted. The confirmation panel will appear on the right side, and the Delete button should be pressed for the type to be permanently deleted.

Fig. 14.15: *Deleting a player type*

Warning: If an *external device* type is removed, all the *external devices* of this type will be associated to the first type in the list. This means that any guest connecting one of the affected *external devices*, will be provided with wrong instructions to connect.

Crear un nuevo tipo de *external device*

To add an *external device* type to the tool, press the New button on the top right-hand corner of the *external device* types list. A form will appear on the right side with several fields to be filled, although just the type name will be in use, since the rest of fields are not used in the current version of Arantia TV.

Fig. 14.16: *Creation form of a player type*

Note: The "Type name" is the only required field in this form.

Warning: In the current version of Arantia TV, if a different *external player* type than those preloaded in the tool is applied to an *external player*, the interface will not show any instruction message in the *player* screen when the guest tries to access the device, the source switch will not be made either. The only *external device* types supported in Arantia TV are "Chromecast", "AppleTV" and "HDMI".

14.5 Languages

In the current version of Arantia TV there are two types of languages: those that can be configured for the *players* interface in the rooms; and the languages corresponding to the nationalities of television or radio *channels* the guests can access, which order can be configured in *"Channels -> Languages list"*. These differences can be managed and checked in the section "Hotel -> Languages", available on the side menu of the administration tool.

Fig. 14.17: *Languages list*

In this section the user can list all the languages currently registered in the system, either to configure the interface language or to define nationality of a channel. It allows as well to check if a language is currently active or not, or the language codes, which the *players* will use to properly show the information.

Edit a language

If the user needs to edit the parameters of a given channel should click on the icon of the language to be modified. A form will be opened on the right with all the fields of a language: order of appearance in the interface, name, two digit code and the three digit ISO639 code, flag, activation, availability for interface translation and availability to use it as a channel nationality in the languages list. In the section for *creating a new channel* there is more information available on these fields.

Fig. 14.18: *Edition form of a language*

Note: Order, name, ISO639 code and flag are required in this form. The rest of fields in the form will have a

default value.

Warning: The first language in the list (English) can not be edited.

Delete a language

To remove a language from the system, click on the icon of the language to be deleted. The confirmation form will appear on the right side, where the Delete button should be pressed to permanently delete the language.

Fig. 14.19: *Deleting a language*

Warning: The first language on the list (English) can not be deleted. When removing any other language, all the elements configured with this language (channels, languages list, *players*, etc) will change to the default language, English (en) in this case.

Create a new language

To add a new language to the system, just click on the New icon on top of the languages list. This will open on the right the creation form of a language, containing the following fields:

- Order, to define which position this language will appear in the configuration panel if the Arantia TV interface.
- Language name.
- Language code (two digits), which is a drop-down menu with all the available languages with their code between brackets.
- ISO639 code (three digits), which is necessary to configure certain *player* types.
- Flag, an element which allows to load files (it is recommended to load small sized image files) to describe the language using a flag.

- Active, this field configures the availability of this language in the language settings of the interface.
- Available on interface, defining if this will be included or not in the list of languages the interface can be translated to in the settings of Arantia TV menu, as well as in the first step of the edition or creation form of a languages list.
- Available on channels, will define if this language is included or not in the second field of the edition or creation form of a *languages list*, as well as in the channel forms.

Fig. 14.20: *Language creation form*

Note: Order, name, ISO639 code and flag are required in this form. The rest of fields in the form will have a default value.

14.6 Weather cities

In this section of the tool, which can be accessed in "Hotel -> Weather cities" on the side menu, the user can add, edit or delete the available cities for configuring the weather widgets in the section *"Widgets -> Weather"*. These cities are shown in the cities list of the tool with its code (which is mandatory to retrieve the meteorological information) and the time this information was last updated.

Fig. 14.21: *List of available cities in the tool to be used in the weather widget*

Edit a city

To modify the name or code of a city, click on the icon on the right side of each city. A form with these fields will appear on the right for the user to edit them.

Fig. 14.22: *Edition form of a city*

The city search tool is placed on the bottom area of the form, showing all the cities matching the character string in the search field. Once the desired city appears in the list of found cities, when clicking on its button the fields "Name" and "Code" in the form will be automatically filled. With this feature, the exact code of the selected city can be obtained. The image below shows how to use the search utility to modify the name and code when editing a city.

Fig. 14.23: *Search panel in the city edition form*

Warning: If the city code is not properly set in this form, the weather information will not be properly retrieved.

Note: Editing a city in this form will modify the "City" field in the *widget* corresponding to this city.

Note: All the fields in this form must be filled. Using the search panel is not mandatory, but strongly recommended.

Delete a city

To remove a city from the system, click on the icon of the selected city for the confirmation panel to be opened on the right side. To permanently delete this city, press on the Delete button.

Fig. 14.24: *Deleting a city*

Warning: Deleting a city will remove from the system all the *widgets* created for this city.

Add a new city

To add a new city to the system, click on the + New button on top of the cities list. This action will open a form with the fields "Name" and "Code" for the user to input this data.

Fig. 14.25: *Creation form of a city*

The city search tool is placed on the bottom area of the form, showing all the cities matching the character string in the search field. Once the desired city appears in the list of found cities, when clicking on its button the fields "Name" and "Code" in the form will be automatically filled. With this feature, the exact code of the selected city can be obtained. The image below shows how to use the search utility to modify the name and code when editing a city.

Fig. 14.26: *Search panel in the city creation form*

Warning: If the city code is not properly set in this form, the weather information will not be properly retrieved.

Note: All the fields in this form must be filled. Using the search panel is not mandatory, but strongly recommended.

14.7 Rates

In this section the user can manage the pricing and rates of any pay products or services available in Arantia TV, like the premium *channels packages*. When the user enters this section in "Hotel -> Rates" on the left-side menu, the list of currently available rates is shown. This table shows, for each rate, the prices, types, durations and time units. In this table the rates can also be edited, deleted or created, as shown in the image below.

Fig. 14.27: *List of existing rates in the tool*

There is only one type currently available for pricing in Arantia TV:

- Fixed pricing: using this type of fares, the duration of the rights the client can buy is fixed, meaning when the period stablished with the fields "Duration" and "Time units" ends, the services purchased paying the amount introduced in the "Price" field are not more available for the guest. Using this rate type the guest pays a fixed price to access a certain content or service for a given time.

Note: In the current version of Arantia TV, the only element which allows pricing are the pay *canales*, and exclusively on fixed pricing mode.

Note: The currency considered for pricing in the administration tool can be configured in *"Configuration -> General settings"*.

Edit a rate

To edit the available parameters for a certain pricing, the user has to click on the icon of the corresponding price, opening on the right side the rates creation form. In this form, the editable fields for a rate are the price, type, duration, time unit and channel packages with this rate.

Fig. 14.28: *Edition form of a rate*

Note: There should not be any empty field in this form, but packages, that may have no elements selected.

Delete a rate

To remove a rate from the tool, just click on the icon of the selected rate for the confirmation form to appear on the right. To permanently delete a rate, click on the Delete button.

Fig. 14.29: *Deleting a rate*

Note: Removing a rate will cause any premium elements that were using it to appear without this pricing.

Warning: If the last associated fare of a premium element is deleted, this element becomes a free product, since it has no defined fare.

Create a new rate

Using the + New button placed on top of the rates list, new rates can be created, which will be available for selection in the field "Rates" of other forms.

The fields in this form are:

- Price: amount of money defining the cost of the element associated to a rate for a period of time. The price units for the system can be configured in the *general settings*.
- Type: as mentioned in *the beginning of this section*, the two available rate types in Arantia TV are fixed and fraction.
- Duration: this field must be filled only when selecting fixed rating, entering as well the number of time units defining the duration of the acquired rights with the price set in the "Price" field.
- Time units: defines which unit of measure will be used in the field "Duration".
- Channel packages: defines which channel packages have a rate assigned.

Fig. 14.30: *Creation form of a rate*

Note: There should not be any empty field in this form, but packages, that may have no elements selected.

15. Network

15.1 Network configuration

In this section of the tool, that can be accessed in “Configuration -> Network configuration”, the user can access to the configuration of the network interfaces of Arantia TV server. The Arantia TV installation provides three network interfaces for different purposes, typically:

- eth0: administration interface connected to Arantia VPN.
- eth1: interface providing service for the *players* network.
- eth2: interface connected to the building administration network.

Each interface contains different editable fields (exception made any option is blocking it), as shown in the image below:

Fig. 15.1: *Configuration of eth0 interfaces, administration interface connected to Arantia VPN*

Fig. 15.2: *Configuration of eth1 interface, which provides network service to the players*

Fig. 15.3: *Configuration of eth2 interfaces, connected to the building administration network*

There are several fields for configuring each interface in these forms, which will be explained below:

- Active: defines if this interface should be or not active.
- Name: label showing the name of the interface, it can not be edited.
- Type: drop-down selection assigning the type of interface (VPN, *Players* or Admin), allowing to distinguish each of them.
- Description: brief text explaining the purpose of each network interface.
- Status: label showing if the network is active or not (*up* / *down*).
- IP: IP address of the network interface.
- Network: defines the network the interface is connected to.
- Netmask: indicates the boundaries of the network, defining the IP address of the subnet and the addresses corresponding to the client.
- *Broadcast*: address serving the *broadcast* service in this network.
- Gateway: address used for internet access.

Besides, as an additional configuration, the user shall indicate the network interface connected to the gateway. To select this option, the dropdown menu will list all the active network interfaces with static IP configuration.

Note: The "current value" labels placed on top of some of the input fields inform about the current value of the corresponding parameter. Excluding some specific cases explained below, whenever this value does not match those in the input field, it means there is an inconsistency between the stored value in the Arantia TV database and the current configuration value in the server. The label value and the text field will not match in the following cases:

- In case a network interface has a configured gateway address, but this is not the interface selected to provide gateway. In this case, the "Current value:" label will indicate the network interface which is actually providing the gateway information.

- If the network interface is not active, the "Current value:" label for each of the fields will display the message "disabled".

Warning: None of the default network interfaces can be removed from the system in this section of the tool. It is recommended to disable any interface that will not be in use.

Add a network interface

With the + New button under the network interfaces forms, a new interface can be added for editing all the required parameters.

Fig. 15.4: *Creating a network interface*

Note: Any network interface that has been added using + New button will be created disabled and every field in the form will be empty for the user to edit them just after being added to the tool.

Remove a network interface

Using the Delete button in the new interface, this can be deleted from the list. To remove it from the server configuration, the configuration has to be saved again in the form.

Fig. 15.5: *Deleting a network interface*

15.2 DNS

In this section of the tool, available in "Configuration -> DNS", the user can configure the DNS[3] service provided by the server, as well as the server DNS settings.

Fig. 15.6: *DNS configuration panel*

At the top of the form, corresponding to the DNS service provided by the server, this setting can be enabled or disabled as well as the *host* name that will be used in the server.

Note: The DNS name of the Arantia TV server is "arantiatv3.local.arantia.com", and it will be available from any network connected to the interfaces.

Note: The *host* name field is mandatory in this part of the form.

[3] The domain name system, DNS, is a hierarchical decentralized naming system for devices connected to IP networks, like Internet or a private network. Its most important function is to translate human-friendly names into the binary identifiers corresponding to the devices connected to the network, to locate and address them.

At the bottom there are three editable parameters related to the DNS configuration in the server. The domain name the server will be using is mandatory and is placed first. The other fields are the addresses of the two DNS servers the Arantia TV server can use.

15.3 DHCP

In the "Network -> DHCP" section, the DHCP[4] server, as well as each DHCP instance assigned to an active *network interface*, can be managed as shown in the image below.

Fig. 15.7: *DHCP configuration panel*

In this panel, the user can enable or disable the DHCP server, as well as check the current status. To confirm this changes the Update buttons should be pressed. To edit a DHCP instance, click on its name at the bottom of the panel for the DHCP instance edit form to be opened on the right, which allows to consult (not modify) the parameters of the network interface settings, configured in *"Network -> Network configuration"*. Besides, in the bottom area of this form, all the parameters of the selected DHCP instance can be edited. These parameters are:

- Enabled: enables or disables this option.
- Status: shows the current status of this instance (*enabled* or *not enabled*).
- Subnet: indicates which network this instance will be using. It is not editable, since it is defined according to the subnet of the corresponding interface.
- Netmask: as in *network interface configuration* form, the netmask indicates the boundaries of the network, defining the IP address of the subnet and the addresses corresponding to the client. It is not editable, since it is defined according to the netmask of the corresponding interface.
- Range from: first IP address this DHCP instance can assign to the hosts without IP reservation. IP addresses ending in ".o" are not allowed.
- Range to: last IP address this DHCP instance can assign to the hosts without IP reservation. IP addresses ending in ".o" are not allowed.
- Default lease time for a player[5]: this field defines, in seconds, which is the default lease time for this DHCP instance.

[4] The dynamic host configuration protocol, DHCP, is a client/server networking protocol where, commonly a server will manage a list of dynamic IP addresses which will be allocated to DHCP clients as they are not previously assigned, this server is "aware of" which device held that IP address and for how long, and which device have been assigned after release. This way clients in an IP network will get their configuration parameters automatically.

[5] A DHCP server assigns an IP address to a new device for a time period for which the allocation is valid, called DHCP lease time. When this period expires, this IP address becomes available for the DHCP server to assign it to a different device.

- Max lease time: this field defines, in seconds, which is the maximum lease time for this DHCP instance.
- DNS server: IP address of the DNS server for TVs.
- DNS search domain name: the DNS server should search this domain name to avoid any ambiguity.
- Players gateway: IP address of the gateway device for players with IP reservation.
- Range from: first IP address this DHCP instance can assign to a player. IP addresses ending in ".o" are not allowed.
- Range to: last IP address this DHCP instance can assign to a player. IP addresses ending in ".o" are not allowed.
- Default lease time[5]: this field defines, in seconds, which is the default lease time for this DHCP instance for hosts without IP reservation.
- Max lease time: this field defines, in seconds, which is the maximum lease time for hosts without IP reservation in this DHCP instance.
- DNS server: IP address of the DNS server for hosts without IP reservation.
- DNS search domain name: the DNS server should search this domain name to avoid any ambiguity.
- Gateway: IP address of the gateway device for players without IP reservation.

Fig. 15.8: *DHCP instance edition form*

Note: The names of the required fields in this form are marked with an asterisk.

Note: DHCP instances can not be added or deleted in the tool. The user can edit the instances corresponding to the default network interfaces that are set as active. Any network interface the user might create will not have an editable DHCP instance.

Note: The "current value" labels placed below some of the input fields inform about the current value of the corresponding parameter. Whenever this value does not match those in the input field, it means there is an inconsistency between the stored value in the Arantia TV database and the current configuration value in the server.

Warning: When editing the IP range reserved to the players, all the registered TVs in the corresponding network with an IP out of this range will be rebooted.

15.4 Routes

In this section, available on the side menu of the tool in "Configuration -> Routes", the user can consult the server routing table, which stores the routes to different nodes in the network.

Fig. 15.9: *Routing table in the tool*

At the top of the panel the route creation form is available, allowing the user to add a new route, filling the fields "Target host", "Netmask", "Device" and "Gateway". A new route will be added clicking on the Add button when, at least, the three first fields have been filled. Below, the routing table with the current routes in the system is shown. These routes can be removed in this list by clicking on the corresponding icon.

Note: To add a new *host* route, the "Genmask" field should have the value "255.255.255.255", as this is a mandatory field.

16. Configuration

In this section of the tool, the user can manage several configurations, like users, *players* or general settings, of the system where Arantia TV is installed.

16.1 General settings

Accessing the section "Configuration -> General settings" in the side menu of the tool, the user can consult and manage the settings the Arantia TV interface will be using in the *players*, like the default channel assigned to the wakeup alarms without any defined channel or the selected currency for the pay channel packages, as an example.

Fig. 16.1: *Table showing the general settings required in the interface*

In this panel it is possible to create new sets of general settings, as well as editing or deleting the existing.

> **Warning:** Between all the available sets in the settings list, the Arantia TV interface will select the first of them. It means that to use the new settings that have been created, the previous elements in the list should be removed for them to be applied on the *players* of the installation.

Edit a general setting

To edit any of the fields of a general setting, click on the icon of the corresponding set. A form will appear on the right with several fields like the default channel to be used in the wakeup alarms or the mode the channel list will be shown, among others. These fields are explained in detail in the section *"Add a new general setting"*.

Fig. 16.2: *Editing general settings*

Hint: It is not recommended to leave any empty field in a general setting. The interface could not show properly some information like, for example, the price of the pay packages.

Delete a general setting

To delete a general setting, click on the icon on the right of the selected setting. The confirmation panel will appear on the right side for the user to confirm this action clicking on Delete.

Fig. 16.3: *Deleting a general setting*

Hint: It is not recommended to leave the tool without any general setting. The interface could not show properly some information like, for example, the price of the pay packages.

Add a new general setting

To add new general settings to the tool, just click on the + New button on top of the general settings list and the general settings creation form will be opened on the right side.

Fig. 16.4: *Creating new general settings*

This are the fields contained in the form:

- Default channel for wakeup alarms: this drop-down list allows the user to choose between all the channels registered in the tool. The selected channel will be assigned to any wakeup alarm with no channel assigned (for example, an alarm that would have been created in *"Rooms -> Rooms list -> Add alarm"* without selecting any channel in its "Channel" field).

> **Warning:** In case this parameter is in use, when selecting in this field a channel the guest can not watch (for example, a channel included in a package the guest has not acquired, or a channel that is not available in the room), the channel launched with this alarm will be that one which was on the screen when the alarm sounds.

- Default volume: this setting is not used in this current Arantia TV version.
- Currency: symbol, abbreviation or word that will be placed next to the prices in the purchasing sections of the interface (at this moment just for pay channels packages).
- Backend type: this field can not be edited, just informs what *backend type* the current general settings are related to.
- Demo: only selectable values are 0 or 1, and enables the system to be set as a "demo".
- Default mode for TV: choosing between "Channels" and "Packages", it will define the way the channels are shown to the guest in the Arantia TV interface, in the TV service. In case "Channels" is selected, the guest will see a complete list with all the available channels to be played (free channels and purchased pay channels). Otherwise, if "Packages" is selected, in the TV service the guest will first see a list of all the packages in the tool, where each can be selected to access to their channels (in case these are free or have been purchased) or proceed to rights acquisition of the pay packages available for purchasing.
- Waiting time for multiple *firmware* upgrades: in case an update command is sent to a high number of Arantia Nemesis Android *players*, this is the time between the update file transfers for the different units to avoid network congestion.

Warning: The Arantia TV interface will select, between all the available settings, only the first of them. This means if the user requires new created settings to be used, the previous settings should be removed from the list for the new setting to be applied in the *players* of the installation.

16.2 Users

When accessing to "Configuration -> Users" in the left-side menu, a list is shown with all the users currently registered in the tool, which can have different permissions levels for accessing sections in the tool. This table shows the usernames that have been registered, with other identification data which is not mandatory. The same way, according to the currently logged user permissions, this user's data (and some other users in the tool) can be modified, as well as registering new users or remove them.

Fig. 16.5: *List of users of the tool*

Edit a user

To edit a user settings, click on its icon and the user edition form will appear on the right side, containing different editable fields as shown in the image below:

Fig. 16.6: *User edition form*

The settings that can be modified in this form are the username, access password, the name and surname of the person accessing with this username, email address, user activation in the tool, its *permission groups* and any directly assigned permission for this user. In the section *"Create a new user"*, this fields are explained in detail.

Note: To change the password of a user in the tool, a form will be opened on the right side when clicking on "Change password". In this form, the user should insert the current password once and the new password twice.

Fig. 16.7: *Editing a user password*

Note: The only required field in the users edition form is the user name.

Delete a user

To permanently delete a user from the tool, just click on the icon on the right of that user for the confirmation form to be opened. Once there press on the Delete button to confirm user removal.

Fig. 16.8: *Deleting a user*

Note: When trying to delete a currently logged user, a message will appear instead of the confirmation form.

Fig. 16.9: *Warning message when deleting a currently logged user*

Create a new user

To add new users to the tool, the icon shall be pressed, it is placed on top of the users list right to the button. Once the button has been pressed, the new users creation form will appear on the right side containing the following fields:

- Username: this will be the name to log in the tool.
- Password: it is mandatory to control the tools access.
- Name: as the surname and email address, it is not mandatory, but it will define the person using a certain username in the tool.

- Surname: surname of the person using a certain username. This field is not mandatory.
- Email address: contact email of the person/s or company using a username. This field is not mandatory either.
- Active: this enables or disables the access to a certain user. This way, a user access to the tool can be blocked without deleting the username and password.
- Groups: the *permission groups* allow to grant a user simultaneous access to certain form or configurations in the tool.
- User permissions: in a similar way as the permission groups, the permissions directly defined for a user allow to access to certain sections and fields in the room, independent of the permissions of the user's group .

Fig. 16.10: *New users creation form*

Note: The only required fields in the user creation form are the username and password.

Note: Users "admin" and "api" have all the available permissions in the tool, independent of what permissions or groups are defined form them in the user *edition* and *creation* forms.

16.3 Permission groups

In the section "Configuration -> Permission groups" on the left side panel of the tool, the groups the users belong to can be modified, as well as created or deleted.

Fig. 16.11: *Panel of permission groups in the tool*

Edit permissions groups

Using the icon right to each group, their name and defined permissions for them can be modified.

Fig. 16.12: *Editing a permissions group*

Note: The only required field in this form is the group name.

Note: Editing the defined permissions for a group causes the modification of the permissions the user/s belonging to such group would have.

Delete a permissions group

To delete a permissions group, click on the icon next to it. A form will appear for the user to confirm deletion pressing on Delete button.

Fig. 16.13: *Deleting a permissions group*

Warning: Deleting a permissions group where any users were included will cause this group's permissions to be removed from these users.

Create a new permissions group

To create a new permissions group, just click on the New button on top right-hand corner of the groups list. The permissions group creation form will appear on the right side to introduce, at least, the name of this new group. To define the permissions this group will provide to the users included, these permissions should be selected in the second field of the form.

Fig. 16.14: *Creating a permissions group*

Note: The only required field in this form is the group name.

16.4 List of *Players*

In the options menu on the left side of the screen, when selecting "Configuration -> *Players* list" a list will open showing a list with all the *players* currently registered in the system.

Fig. 16.15: *Panel with the players registered in the tool*

This list offers diverse information about the *players* like the MAC address, IP, type of *player* (editable in *"Hotel -> Types of players"*) and the room or space within the room it is located. Ending this information, there is a column "Actions", which allows the user to make different actions with the *players*.

Note: In this view the *players* installed in any location within the room will be listed as well.

List the *external devices* of a *player*

When clicking on the icon of a *player*, a list with all the *external devices* installed in this *player* will open on the right side. In this list, the user can consult name and type of each *external device*, as well as the *player* where it is connected.

Fig. 16.16: *Screenshot of external devices of a player*

On the right side of the table, two actions can be done on each *external device*: *edit* or delete.

Edit an *external device*

Once clicked on the icon of an *external device*, the edition form of the device will be opened on the right. This is the same that can be accessed from *"Configuration -> External Devices -> Edit external device"*. In this form, the user can modify the device name, the password to connect to the device, the type of connection (HDMI, USB, RGB, etc), connector index in the *player* it is connected to, the type of *external device* (editable in *"Hotel -> Types of external devices"*) and network information, like the IP and MAC addresses of the device or the name of the Wi-Fi network it can connect to. At the bottom of the form, there is a non-editable field showing the *player* this device is connected to.

Fig. 16.17: *Editing an external device of a player*

Note: Device name, *player* connector index and password to connect to the *external device* fields are mandatory in this form. Other of the fields are filled with a default value (like the type of connector or *external device*), while the *player* which the device is connected to can not be edited. If this *external device* has mistakenly been associated to a *player*, it should be deleted and created again.

Delete an *external device*

To deallocate from a player and remove from the system an *external device* in the *players* list, the user clicks on the icon to open on the right side the confirmation panel.

Fig. 16.18: *Deleting an external device of a player*

Edit a *player*

To edit the configuration of a *player*, just click on the icon of this *player* in the table of *players*. Once done, a form will be opened on the right side to modify the parameters than define a *player*, the same way it is showed for *create a new player*.

Fig. 16.19: *Panel for player edition*

This form allows the user to modify the IP and MAC of the *player*, if the DHCP server is not enabled, as well as to select its type (*"Hotel -> Types of players"*), type of display (*"Hotel -> Display types"*), the room where it is located and the language selected for configuration when there is no assigned guest. In the section *"Create a new player"* there is a detailed description of the fields in this form.

Note: Type of *player* and its language will always have an assigned value. All other fields could be left blank, although it is not recommendable (for example, the *player* IP address is required for rebooting it properly).

Delete a *player*

For deleting a *player*, the user just should click on the icon for the confirmation panel to be opened on the right side. Once this action is confirmed with the Delete button, the *player* will be removed from the system and rebooted, signalling these two actions result.

Fig. 16.20: *Confirmation panel for deleting a player*

Note: Removing a *player* implies deleting all of the alarms it should have assigned. The field *player* in the registered *external devices* will be empty, and their name will change.

Reboot a *player*

This option, available when clicking on the icon in the list of *players*, will reboot a *player*. A success or error message will appear after confirmation clicking on the Reboot button, depending on the result of this command.

Fig. 16.21: *Rebooting a player from the players list*

Note: For the *player* to reboot properly, its "IP" field must be correctly configured in the *create* or *edit* form.

Switch off a *player*

This option, available when pressing the icon in the list of *players*, allows the user to completely switch off a *player*.

Fig. 16.22: *Switching a player off from the player list*

Warning: This functionality is only available on LG players.

Turn off the panel of a *player*

This option, accessible using the icon in the list of *players*, allows the user to turn off the panel of a *player*, while the device is still on.

Fig. 16.23: *Turning off a player's screen from the player list*

Warning: This functionality is only available on LG players.

Create a new *player*

With the + New button, located on top of the list of *players*, a new *player* can be created, linked to the room that has been assigned in the form on the right. The fields defining a *player* are the IP address and MAC, as well as the type of *player*, type of display, the room where it is installed and the default language assigned when there is no guest staying in this room.

Fig. 16.24: *Form to create a new player*

The fields in this form are:

- IP: field for configuring the IP address of the *player*, which will be used for, among other actions, rebooting it.
- MAC: physical address of the *player*, which is useful for easily identifying this device in the network if any issue would happen or any status request should be needed.
- Type of player: sorts by brand and model a set of *players*, either a television (for example "LG 43UW761H-ZA") or an STB ("Arantia Nemesis Android"). Can be managed from *"Hotel -> Player types"*.

  Note: The types of players are predefined in the system, and it is not allowed to add new ones unless they pass the defined validation procedure.

- Display type: this can be edited in *"Hotel -> -display types"*, and defines a subtype in the *player* types. Currently, there is no effect when using this feature in the Arantia TV system.
- Room: in this field, all the rooms registered in the system can be selected, including sub-rooms. The room where this new *player* is (or will be) installed must be selected.
- Language: the value entered in this field will define the language showed in the Arantia TV interface, provided that the room where it is installed is empty. Otherwise, the *player* language will be configured using the same value initially assigned to the guest after the *check-in* ("Guests -> Guest List -> *Edit / Create* a guest"). After *check-in*, the guest may change the language for any of the players using the "Languages" service of the Arantia TV interface.

Note: Type of *player* and its language will always have an assigned value. All other fields could be left blank, although it is not recommendable (for example, the *player* IP address is required for rebooting it properly). "IP" and "MAC" fields must be unique in the system.

Import *players*

Using the Import button, a great amount of *players* can be simultaneously added to the system. A .csv file complying certain characteristics can be imported for a proper creation of the new *players*.

1. Each row in the file (record) will define a *player*, the separator character between fields must be ",".
2. The fields are the following:
   - IP of the *player*.
   - MAC of the *player*.
   - Type of the *player* (type *id*).
   - <Empty field>.
   - Language (*id* of the language).
   - Room where the *player* is located (room *id*).
   - <Empty field>.
   - <Empty field>.
   - <Empty field>.
3. It is not necessary to fill all the fields (some of them could be left blank), but the order of the parameter must be the same as shown above.

The image below shows an example of an exported .csv file, corresponding to the previous *players list*.

	A	B	C	D	E	F	G	H	I
1	172.20.0.100	a4:b1:21:04:07:5e	7		1	9			
2	172.20.0.101	a4:b1:21:04:09:39	7		1	10			
3	172.20.0.102	a4:b1:21:04:08:bc	7		1	11			
4	172.20.0.103	a4:b1:21:04:08:ca	7		1	12			
5	172.20.0.104	a4:b1:21:04:09:50	7		1	13			
6	172.20.0.105	a4:b1:21:04:08:59	7		1	14			
7	172.20.0.106	a4:b1:21:04:07:d4	7		1	15			
8	172.20.0.107	a4:b1:21:04:07:c8	7		1	16			
9	172.20.0.108	a4:b1:21:04:07:4c	7		1	17			
10	172.20.0.109	a4:b1:21:04:08:02	7		1	18			
11	172.20.0.110	a4:b1:21:04:08:d5	7		1	19			
12	172.20.0.111	a4:b1:21:04:07:bd	7		1	20			
13	172.20.0.112	a4:b1:21:04:07:c7	7		1	21			
14	172.20.0.113	a4:b1:21:04:08:01	7		1	22			
15	172.20.0.114	a4:b1:21:04:07:dd	7		1	23			
16	172.20.0.115	a4:b1:21:04:07:d3	7		1	24			
17	172.20.0.116	a4:b1:21:04:07:f6	7		1	25			
18	172.20.0.117	a4:b1:21:04:08:a2	7		1	26			
19	172.20.0.118	a4:b1:21:04:07:ee	7		1	27			
20	172.20.0.119	a4:b1:21:04:07:d5	7		1	28			
21	172.20.0.120	a4:b1:21:04:07:5a	7		1	29			

Fig. 16.25: *.csv file example displayed in a spreadsheet*

```
172.20.0.100,a4:b1:21:04:07:5e,7,,1,9,,,
172.20.0.101,a4:b1:21:04:09:39,7,,1,10,,,
172.20.0.102,a4:b1:21:04:08:bc,7,,1,11,,,
172.20.0.103,a4:b1:21:04:08:ca,7,,1,12,,,
172.20.0.104,a4:b1:21:04:09:50,7,,1,13,,,
172.20.0.105,a4:b1:21:04:08:59,7,,1,14,,,
172.20.0.106,a4:b1:21:04:07:d4,7,,1,15,,,
172.20.0.107,a4:b1:21:04:07:c8,7,,1,16,,,
172.20.0.108,a4:b1:21:04:07:4c,7,,1,17,,,
172.20.0.109,a4:b1:21:04:08:02,7,,1,18,,,
172.20.0.110,a4:b1:21:04:08:d5,7,,1,19,,,
172.20.0.111,a4:b1:21:04:07:bd,7,,1,20,,,
172.20.0.112,a4:b1:21:04:07:c7,7,,1,21,,,
172.20.0.113,a4:b1:21:04:08:01,7,,1,22,,,
172.20.0.114,a4:b1:21:04:07:dd,7,,1,23,,,
172.20.0.115,a4:b1:21:04:07:d3,7,,1,24,,,
172.20.0.116,a4:b1:21:04:07:f6,7,,1,25,,,
172.20.0.117,a4:b1:21:04:08:a2,7,,1,26,,,
172.20.0.118,a4:b1:21:04:07:ee,7,,1,27,,,
172.20.0.119,a4:b1:21:04:07:d5,7,,1,28,,,
172.20.0.120,a4:b1:21:04:07:5a,7,,1,29,,,
```

Fig. 16.26: *.csv file example displayed in a text editor*

Warning: It is a requirement that the referenced elements (by ID) exist in the system with their corresponding ID, otherwise the import will not be completed properly.

Export *players*

Clicking on the Export button a .csv file will be downloaded in the browser containing all the information about the *players* registered in the system, formatted as described in the previous section.

Reboot several *players*

In the same way that several *players* may be deleted using the Delete selected button, it is possible to reboot simultaneously some (or all) of them with the Reboot selected button, located on top. Once all the *players* the user wants to reboot have been selected (first column in the *players* list), just click on the Reboot selected button.

Fig. 16.27: *Rebooting several players*

Once done, the confirmation panel will appear on the right side, informing the user if the *players* reboot has been successful or not after clicking on the Reboot button.

Fig. 16.28: *Confirmation panel for rebooting several players*

Note: For the *players* to reboot properly, it is mandatory that the "IP" field for each of them has been correctly configured in the *create* o *edit* form.

Switch off several *players*

It is possible to switch off simultaneously some (or all) of them with the Power Off sel. button, located on top. Once all the *players* the user wants to turn off have been selected (first column in the *players* list), just click on the Power Off sel. button.

Fig. 16.29: *Switching off several players from the player list*

Once done, the confirmation panel will appear on the right.

Fig. 16.30: *Several players switch off confirmation panel*

Warning: This functionality is only available on LG players.

Turn off the panel of several *players*

It is possible to simultaneously turn off the screen of some (or all) of the players with the Panel Off sel. button, located on top. Once all the *players* whose screen the user wants to turn off have been selected (first column in the *players* list), just click on the Panel Off sel. button.

Fig. 16.31: *Turning off several players' screen from the player list*

Once done, the confirmation panel will appear on the right.

Fig. 16.32: *Several players' panel turn off confirmation panel*

Warning: This functionality is only available on LG players.

16.5 *Players* installation

In this section of the tool it is possible to register the different *players* to be used in the Arantia TV installation. For this, it will be necessary to run a search of all the *players* connected to the network. Once accessed to "Configuration -> *Players* installation" in the side menu of the tool, a search form will appear for the user to select the different options to filter this search. These options are, as shown in the image below, the *player* manufacturer, model and interface where they are connected ("eth1" if the default configuration has been kept (*as shown earlier* "eth1" interface will be providing service to the *players* network)).

Fig. 16.33: *Players search tool in the system*

Once the search parameters have been entered, press the Search button for the network scan to begin, re-

sulting in a list with all the *players* detected complying the required parameters, as shown in the image below:

Fig. 16.34: *Players search result*

Using the available icons and buttons in the panel, the user can make different actions with one or several of the detected *players*, which are detailed below.

- icon: this feature permits to consult information about each of the detected *players*, like current status, model name, IP address, MAC address, *player* type, among others.

Fig. 16.35: *Information on a detected player*

Note: Values in this panel can vary for each type of player, according to the information these are sharing.

- icon or Register selected button: it is necessary to click on this icon or buton to register the selected *players* in the tool and access them in *"Configuration -> Players list"*, as well as to

proceed with the installation of Arantia TV in their interface, thus enabling them as *players* to be used by the guests in their rooms.

Fig. 16.36: *Register confirmation of a detected player*

- Icon ⚙ or ⚙ Configure selected button: in this panel is possible to apply the *"configurations available"* to the required *players*. Among all the available configurations, the user can select between the different types, a *firmware* upgrade or cloning another *player*'s configuratiion, for example. Once one of the options has been selected, the user will be asked which of the available configuration should be applied to the device. When clicking on the ⚙ Apply selected configurations button, the user will be asked again to confirm these changes will be applied to the selected *players*.

Fig. 16.37: *Configuration of a detected player*

Note: Configurations are added and managed in *"Configuration -> Players configu-*

ration".

Hint: Not all the *player* types are allowed to clone the same parameters. To check the list of settings to be cloned for each *player* type, it is recommended to consult the technical manual of Arantia TV.

- Icon or Homepage selected button: allows to configure the starting page that will be loaded in the selected *players*. This is necessary to indicate which URL contains the Front-End to be loaded to show the guest the Arantia TV interface.

Fig. 16.38: *Management of a detected player main page*

Note: Not all the *player* types available in Arantia TV are allowed to set the initial page this way. Arantia or LG *players* supports this; whereas Samsung does not.

- Icon or Reboot selected button: same as in the *players list*, this function allows the user to reboot one or more *players*, with the difference that these may not be registered in the tool.

Fig. 16.39: *Reboot confirmation of a detected player*

Note: If a *player* is not configurable for any reason, it will be shown in the list of detected *players* highlighted in grey and with a label on the right with the message "Not configurable". For further information on this and other problems, refer to the technical manual of Arantia TV.

Fig. 16.40: *Players search result with errors*

16.6 *Players* configuration

In this section the user can manage the different configurations of the *player* types to be configured. In the list of configurations added to the tool, that can be accessed selecting "Configuration -> *Players* configuration" in the left side menu, a table with all the available configurations in the tool is shown, each having a version number, a configuration type, a brief description, date of creation and the *player* type for which the configuration is intended. In this table, as well as consulting the information of each configuration, it is possible to edit or delete any of them, or create new configurations.

Fig. 16.41: *List of available configurations in the tool*

Get information about a configuration

To obtain information about a specific configuration, the user should click on the on the right of the configurations table. This will open on the right an informative panel with a table of data related to the configuration:

Fig. 16.42: *Getting information of a configuration*

In this table, as well as consulting the information shown in the configurations list, it is possible to check the

name of the file to be installed in the *player* when such configuration is applied.

Edit a configuration

To edit a certain configuration, just click on the corresponding icon. The configurations edition form will be opened on the right, it contains just an editable field for the user: a brief description about the configuration to be applied to the *player*. The other field in the form, version number, can not be edited.

Fig. 16.43: *Editing a configuration*

Warning: If the user requires to edit the configuration or *player* types, or the file associated to a configuration, for example, a new configuration should be created with the new values, since these fields can not be edited.

Delete a configuration

To delete a configuration from the tool, just click on the icon placed, for each configuration, on the right side of the configurations table. A confirmation panel will appear on the right side of this list. To permanently remove the selected configuration click on the Delete button.

Fig. 16.44: *Deleting a configuration*

Create a new configuration

To add a configuration to the system, click on the button to open the new configuration creation form on the right side.

Fig. 16.45: *Creating a new configuration*

As shown in the image above, this field contains the following fields:

- Version: this number is useful to order the different versions that can be applied to a certain *player* type.

> **Warning:** The Arantia TV management tool will prevent a certain configuration type to be applied to a *player* type if there is a previous installed configuration with a lower version number.

- Configuration type: in this drop-down field, the user can select any of the three available values, *firmware*, cloning or "MiCom". This field indicates if the system shall perform a *firmware* upgrade of the *player*,

cloning certain configurations, or a CPU software upgrade of certain *players* types, respectively.

Hint: Not all the *player* types are allowed to clone the same parameters. To check the list of settings to be cloned for each *player* type, it is recommended to consult the technical manual of Arantia TV.

Note: "MiCom" configuration type is valid only for LG manufactured *players*.

- *Player* type: indicates what *player types* will be associated to a configuration. This will make easier the configuration process of a device, since these configurations can be grouped and applied by *player* types.
- Details: brief descriptive message to inform about the version number of a *firmware* or settings to be cloned, for example.
- Configuration files: allows the user to attach the file to be applied with the new configuration.

Once the new setting has been created, for this to be applied to the *players* the user should enter the section *"Configuration -> Players installation"*.

16.7 List of *external devices*

Once in the list showing all the *external devices* registered in the tool ("Configuration -> *External Devices*"), the same general actions explained for most of the previous case can be done: edit, delete and create new elements. Besides, in this table the name and type for each *external device* can be consulted, or the *player* it is connected to.

Fig. 16.46: *Screenshot of the external devices in the tool*

Edit an *external device*

Once the icon has been pressed, the form for editing the device will be opened on the right side. The user can modify the name of the device, the password for access, the type of connector in use (HDMI, USB, RGB, etc), the connector index in the *player*, the type of *external device* (editable in *"Hotel -> Types of external devices"*) and network information, like IP and MAC addresses or the name of the Wi-Fi for wireless connection. Last field in the form is the *player* the device is connected to, but this is not editable. For a detailed description of each field, read the section *"Configuration -> External Devices -> Create an external device"*.

Fig. 16.47: Edit an *external device*

Note: Device name, *player* connector index and password to connect to the *external device* fields are mandatory in this form. Other of the fields are filled with a default value (like the type of connector or *external device*), while the *player* which the device is connected to can not be edited. If this *external device* has mistakenly been associated to a *player*, it should be deleted and created again.

Delete an *external device*

To deallocate from a player and remove from the system an *external device*, the user clicks on the icon to open on the right side the confirmation panel.

Fig. 16.48: *Deleting an external device*

Create an *external device*

To create one or several *external devices* click on the + New button located on top of the list. Once the creation form has been opened on the right side, the parameters for these *external devices* can be configured:

- Name: describes the device.
- Password: for connecting to some *external players* a password may be required, which will be shown in the Arantia TV interface, when selecting the corresponding service.
- Type of connector: it is a drop-down list showing different types of connections, like HDMI, USB, RGB, COMPOSITE, etc. The connector compatible with the new *external device* should be selected (for example, HDMI when creating a Chromecast).
- Connector index: if the *player* which the device is connected to has several compatible ports for it, it is required to define which of them is will be connected to (1, 2, 3, etc).
- Type of device: it is required for Arantia TV to identify which device the guest will be using for showing him the corresponding instructions when the "Casting" service is entered. The types of devices are created and managed in *"Hotel -> Types of external devices"*.
- Network: name of the wireless network where the guest's smartphone or tablet shall be connected to for accessing the *external device* and make use of all its functionalities. This name shall appear in the previously mentioned instructions.
- *Players*: using this field a new *external device* can be registered to one or several *players*. When several are selected, as many *external devices* as selected *players* will be created. It is possible not to assign any *player*, which means the *external device* will be created without any associated *player* (as it would appear in the list of *external devices* after deleting an associated *player*).

Note: Device name, *player* connector index and password to connect to the *external device* fields are mandatory in this form. Other of the fields are filled with a default value, like the type of connector or *external device*.

Note: If an *external device* is created linking it to the wrong *player/s*, the *external device/s* must be erased and created again correctly, since it is not possible to edit the *player* field in the form *edit*.

Fig. 16.49: *Creation form of an external device*

16.8 Alarm monitors

In this section, available in the left-side menu under "Configuration -> Alarm monitors", it is possible to manage different alarm monitors in an installation. These monitors are dedicated STBs to detect when a normally open circuit gets close, or viceversa, depending on the configuration. Whenever this is identified as an emergency, the monitor will communicate this circumstance to the Arantia TV application, for the guests to be alerted through the *"Emergency alarm" service*, which will be showing in the screen the *assigned emergency template*.

Fig. 16.50: *Example of an emergency alarm template in the interface*

In this section, "Configuration -> Alarm monitors", all the monitors created in the tool are listed. This table informs the monitor names, MAC and IP addresses, status and the volume level the alarm will sound in the emergency template. Each monitor defines an area (as there would be only one monitor per location), so any *player* in a location within this area should be assigned to this alarm monitor. If only one monitor detects an emergency, this would be the area to be warned on the situation, and the *players* assigned to this monitor will be displaying in the Arantia TV interface the emergency template of the "Emergency alarm" service.

Fig. 16.51: *Alarm monitors list in the tool*

It is possible to edit, delete, create and activate or deactivate any alarm monitors in this section.

Edit an alarm monitor

To edit the parameters of an alarm monitor, press on the corresponding monitor icon. The alarm monitor edition form will appear on the right side.

Fig. 16.52: *Alarm monitor edition form*

This panel allows the user to edit the monitor name, its MAC and IP addresses, the volume level the alarm audio will sound in the emergency service template, if the remote keys are lock for the guests to be hold in the service, the automatic turn on of the televisions on the emergency alarm template, and the *players* within the area covered by this monitor. In the *alarm monitors creation* form, all these fields are detailed.

Note: In this form, monitor name and MAC address fields are required.

Delete an alarm monitor

To delete an alarm monitor from the system, just click on its icon for the confirmation panel to be opened on the right. Once pressed Delete in this form, the alarm monitor will be permanently removed from the system.

Fig. 16.53: *Deleting an alarm monitor*

Warning: Deleting a monitor with one or several assigned *players* will cause that these *players* can not display the alarm template in case any emergency alarm is triggered within their area.

Activate or deactivate one or many alarm monitors

The alarm monitors will trigger automatically whenever their circuit closes or opens, depending on the model, and will send a signal to Arantia TV for the emergency alarm template to be displayed in the interfaces of every *player* within the monitor area. To manually activate one alarm monitor, the user should press the button of the monitor (this should be inactive). The monitor activation confirmation panel will appear on the right side. To confirm this action, just press the Activate button.

Fig. 16.54: *Manual activation of a monitor*

To manually deactivate a monitor, click on the button of a monitor which is already active, and the monitor deactivation panel will appear on the right. To confirm this action, press Deactivate button.

Fig. 16.55: *Manual deactivation of a monitor*

It is possible as well to activate several monitors at the same time. To do this, all the required monitors should be selected in the tool before pressing the Activate Selected button on the top-right corner of the panel, next to New button. Once pressed, the confirmation panel will appear on the right. To confirm this action, press the Activate button.

Fig. 16.56: *Manual activation of several monitors*

Note: This action will only activate those monitors whose status is "Inactive". If all the selected monitors are active, no action will be done.

To manually deactivate several monitors, these should be selected in the tool before pressing the Deactivate Selected button on the top-right corner of the panel, next to Activate Selected button. Once pressed, the confirmation panel will appear on the right. To confirm this action, press the Deactivate button.

Fig. 16.57: *Manual deactivation of several monitors*

Note: This action will only deactivate those monitors whose status is "Active". If all the selected monitors are inactive, no action will be done.

Add a new alarm monitor

To create a new alarm monitor, press on the + New button right on top of the monitors list. The creation form of an alarm monitor will appear on the right.

Fig. 16.58: *Monitor creation form*

These are the fields in this form:

- Name: name of the new monitor.
- MAC: MAC address of the monitor.
- IP: IP address of the monitor.
- Alarm volume: this is the volume level the audio assigned to the alarm template will play in any *player* assigned to this monitor (this is done in the last field of the form).
- Key lock: if this box is selected, when the alarm template is displayed in the *player*, the guests will not be able to interact with the application using the remote control.
- TV turn on: selecting this check box will force all the *players* to turn on, displaying as a default the emergency alarm template.
- *Players*: select in this field all the *players* sharing the same monitor, meaning they are located in the same area. Any *player* selected in this field will respond at the same time to the activation and deactivation of this alarm monitor.

Note: One *player* can not be assigned to two different monitors at the same time.

Note: In this form, monitor name and MAC address fields are required.

16.9 PMS

If there is a PMS[6] server available at the properties where Arantia TV will be installed, it is possible to integrate with out system in the section "Configuration -> PMS", where the required fields must be filled for the Arantia TV server to communicate with the PMS server in the property.

Note: Compatible PMS are implementing Fidelio's FIAS protocol. Contact Televes for integration feasibility.

Fig. 16.59: *Configuring the PMS integrator in the system*

These fields are: integrator activation, PMS server IP, access port and communication protocol type (TCP or SERIAL). When selecting SERIAL option in the "Type" field, more fields will appear in the form to be filled, like serial port, speed, parity, data field for serial communication and *hardware* control. Once the data has been filled, click in the button.

Fig. 16.60: *Extended fields for serial communication protocol in the configuration form*

[6] The Property Management System, PMS, is a hospitality software application for managing reservations, expenses, logistics, human resources or maintenance services, among other functions. One of the key advantages provided by this hospitality management software is the direct connectivity to the sales channels.

Note: When selecting SERIAL option in the "Type" field, the IP field will be set to a different non editable value.

Arantia TV administration tool has a very useful functionality in this section: download the PMS integrator *logs*. With the Download log button it is possible to download a text file to consult the history of all the operations made with the PMS integrator, just in case any error was reported or to double-check any operation.

Note: The "current value" labels placed on top of some of the input fields inform about the current value of the corresponding parameter. Whenever this value does not match those in the input field, it means there is an inconsistency between the stored value in the Arantia TV database and the current configuration value in the server.

16.10 Backend type

In this section of the tool, which is available in "Configuration -> Backend type" of the left side menu, it is possible to select the type of Arantia TV project that has been installed. This setting allows each form to be suitable for each specific project, making the user tasks easier in the tool.

Fig. 16.61: *Selecting the backend type in the tool*

Note: This setting is configured as a factory default and it is not necessary to modify it.

16.11 Licenses

Note: This section can only be accessed by staff authorized to modify the number of licenses in the system.

The user can modify in this section, "Configuration -> Licenses" available on the left side menu of the tool, the maximum number of *players* allowed to be registered in the system.

Fig. 16.62: *Table showing the available licenses to use Arantia TV*

Edit the number of lecenses

To increase this limit (preconfigured in Arantia TV installation), click on the icon next to the number of available licenses. A form to edit this number (license name is not editable) will be opened on the right.

Fig. 16.63: *Editing the number of available licenses to use Arantia TV*

16.12 Time zone

With the time zone setting, the guests will see in the *players* the correct time of the world region where they are currently located. This section can be accessed from the left side menu in “Configuration -> Timezone”, and contains just a label with the current time and a drop-down field to select one of the time zones available all over the world.

Fig. 16.64: *Selecting a time zone*

Once the user has selected a time zone from this drop-down list, the label with the current time will update to the time in that world region, avoiding errors or confusion when configuring the date and time in Arantia TV.

When this time zone is selected, the user should click on Save and confirm the change in the form appearing on the right. The user is asked to confirm and informed that this change will cause the system to reboot and it will take some minutes to be available again.

Fig. 16.65: *Time zone setting confirmation*

Warning: As informed when confirming the time change, the system will be rebooted causing the management tool to be out of service for some minutes.

16.13 Update options

Accessing the "Configuration -> Update options" section on the left-side menu of the tool, the user will be able to update the system and program different update schedules using the options available.

Set configuration

Pressing the Set configuration button, it is possible to program under certain circumstances and protocols the system updates, as well as the mail list to notify the result and the URL to download the docker-compose image.

Hint: It is recommended to keep the default Televes emails for an automatic communication in case of update failure.

Two options are available to schedule updates:

- As a first option, it is possible to program automatic updates at a given time on specific days of week. If only one update is required, do not enter any specific day.

Fig. 16.66: *Programming updates*

Fig. 16.67: *Scheduled periodic update*

- Otherwise, automatic updates can be programmed. This way, whenever there is a version release of Arantia TV, the system will automatically update.

Fig. 16.68: *Automatic updates*

Fig. 16.69: *Scheduled automatic update*

Update now

Pressing the Update button, it is possible to apply an update immediately: the system will check for new versions and update.

Warning: Some functionalities may be affected for a few minutes while the system is updating.

Fig. 16.70: *Update now*

Disable updates

Pressing on the Disable button, the user can disable the update schedule.

Fig. 16.71: *Disabling updates*

16.14 About

In this section, available accessing "Configuration -> About" on the left-side menu, the user can consult current system version and its registered services.

Fig. 16.72: *About*

Fig. 16.73: *Services list*

17. Power

17.1 Power options

The user will be able to reboot or shut down the system using the three options available in this section, that can be opened in the left-side menu pressing “Power -> Power options”.

Restart Arantia TV

Pressing this button, the user will restart Arantia TV *software*, in case it is required. Once the button has been pressed, a panel will appear on the right-side for the user to confirm clicking on Reboot.

Fig. 17.1: *Restarting Arantia TV from the tool*

Warning: As would happen in *time adjustment*, Arantia TV system, as well as the tool, will be off for some minutes after pressing this button.

Reboot the server

To reboot the server where the Arantia TV system is installed, meaning a *hardware* restart of the system, just click on the designed button. Once pressed, the confirmation panel will appear on the right-side for the user to confirm clicking on Reboot button.

Fig. 17.2: *Rebooting the server from the tool*

Warning: As would happen in *time adjustment* and in *Arantia TV reboot*, the system, as well as the tool, will be off for some minutes after pressing this button.

Shut down the server

To completely shut down the server where Arantia TV has been installed, just click on the third button on the *"power options"* panel. Once pressed, a confirmation panel will open on the right-side for the user to confirm this suth down clicking the Power off button.

Fig. 17.3: *Server shut down from the tool*

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