

# Resource App

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**T Systems** Let's power  
higher performance

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# Agenda

## 01 How we started

Airport Departure , Our global references, Introduction Resource

App

## 02 Resource App: Features & Functions

Tech features, Use Cases, Functions, Other Data





# 01

## How we started



# Airport Departure

## Challenge & Solution

T-Systems developed Airport Management System is a fully-integrated complete solution for digital airport management.

The System offers solutions for the airport's everyday business by offering a large number of modular technical components.

It fully reproduces all flight-related activities based on real-time data, enabling a more efficient cooperation between the parties involved in the flight operations.



# Our Global References

**The Americas**

**Brazil**

- FOR Fortaleza
- POA Porto Alegre

**Chile**

- IQQ Iquique

**Dominican Republic**

- SDQ Santo Domingo

**Jamaica**

- KIN Kingston
- MBJ Montego Bay

**Mexico**

- GDL Guadalajara
- PVR Puerto Vallarta
- ZLO Manzanillo
- MLM Morelia
- AGU Aguascalientes
- BJX Guanajuato
- TIJ Tijuana
- MXL Mexicali
- HMO Hermosillo
- LMM Los Mochis
- LAP La Paz
- SJD Los Cabos

**EMEAA**

**Belgium**

- Airport Coordination

**France**

- LYS Lyon

**Georgia**

- KUT Kutaisi

**Germany**

- FRA Frankfurt
- MUC Munich
- BER Berlin
- DUS Dusseldorf
- HAM Hamburg
- HAJ Hanover
- NUE Nuremberg
- DRS Dresden
- LEJ Leipzig
- SCN Saarbruecken
- BRE Bremen
- CGN Cologne/Bonn
- Airport Coordination

**Hungary**

- Airport Coordination

**EMEA**

**Ireland**

- DUB Dublin
- ORK Cork

**Italy**

- MLX Milano
- LIN Milano

**Netherlands**

- AMS Amsterdam
- Airport Coordination

**UK**

- LHR, LGW London
- MAN Manchester
- STN London

**Zambia**

- NLA Ndola

**APAC**

**China**

- PKX Beijing Daxing
- NKG Nanjing
- HAK Haikou
- PVG Shanghai Pudong
- NGB Ningbo
- SZX Shenzhen
- XMN Xiamen

**Indonesia**

- CGK Jakarta

**India**

- BLR Bangalore

**Malaysia**

- KUL Kuala Lumpur

**Philippines**

- MNL Manila

**Saudi Arabia**

- DMM Dammam



Vasile Mirea | Resource App

# Resource App Introduction

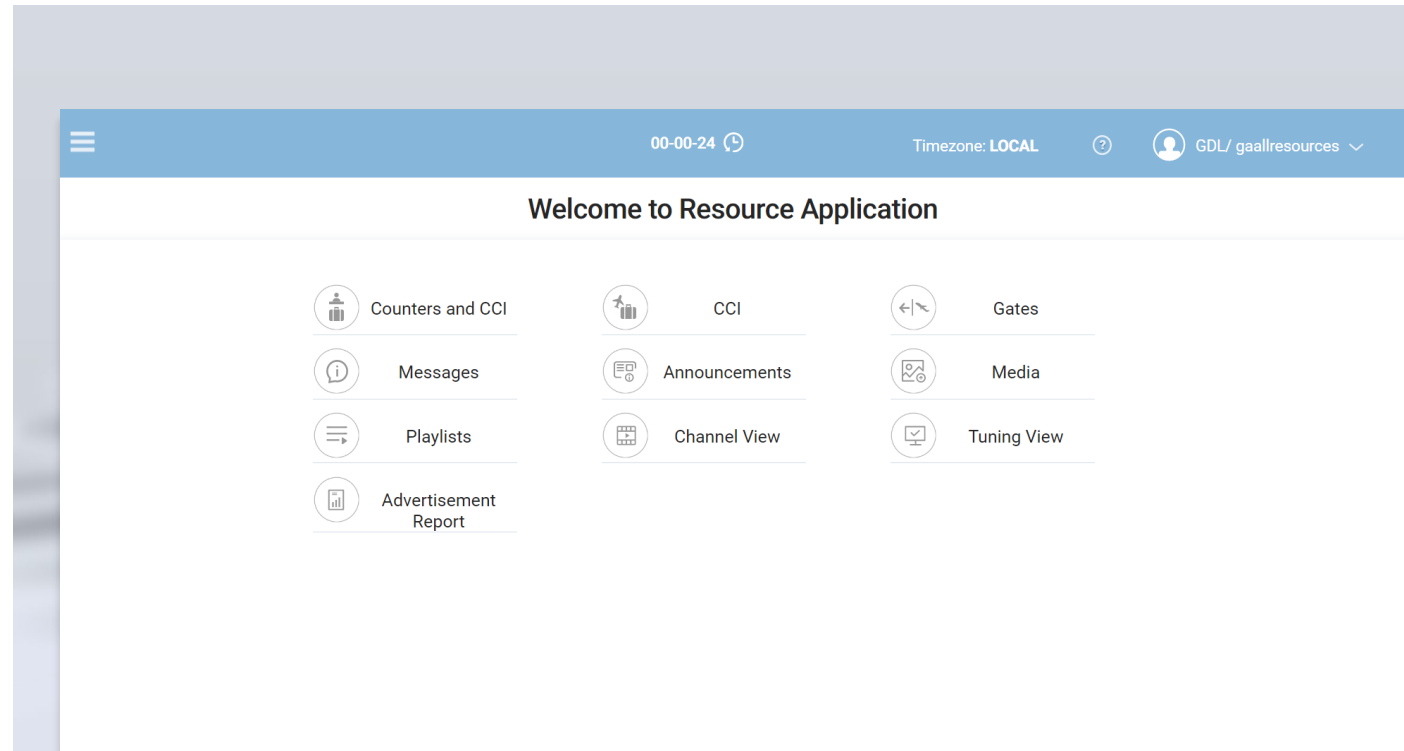
## Advantages

Resource App displays/changes important and relevant Resources and advertising information for the airport business process.

T-Systems' in-house developed Mobile Application Resource App optimize the productivity and increase the process efficiency.

Main advantages are:

- Minimize the communication between stakeholders.
- Cost reduction through time savings.
- Improved security.
- Integrates into the client hardware and software infrastructure.
- Supports improved accessibility: dark mode.
- Corporate design.



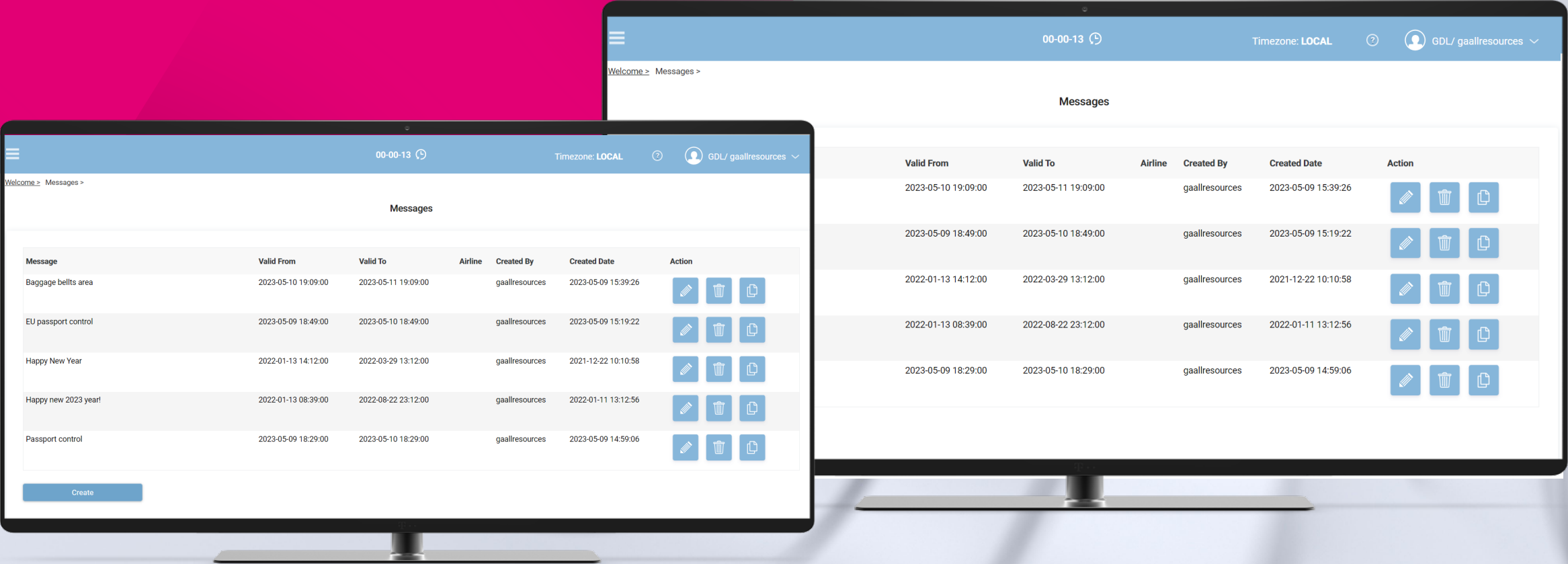
# 02

**Resource App:**

**Features, Use Cases & Functions**

# Internet access

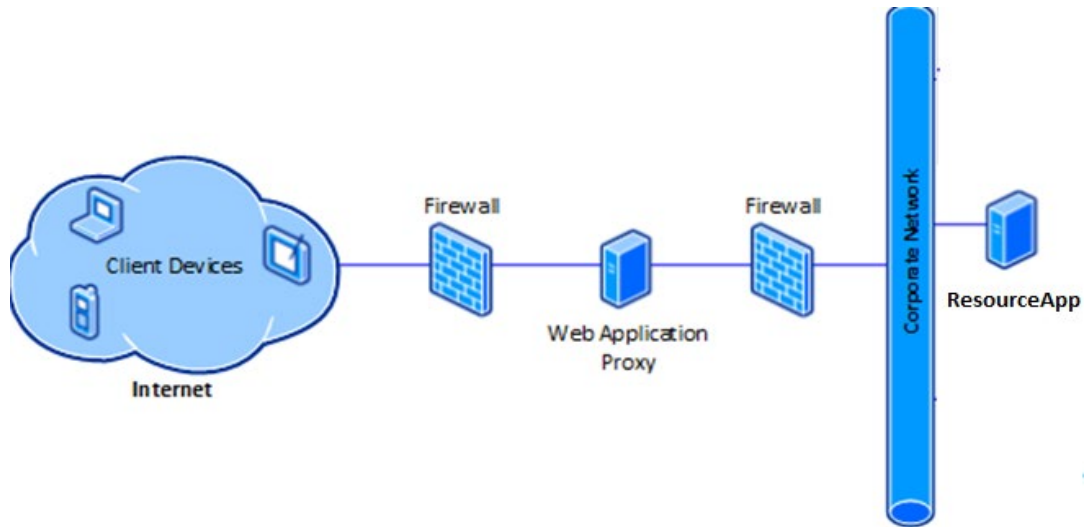
Airlines and Airport partners can access the system from everywhere





# Internet access - Architecture

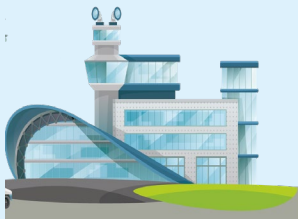
Airlines and Airport partners can access the system from everywhere



# Use Cases

## Airport Team

- Airport Advertising Manager
- User role-based data viewing



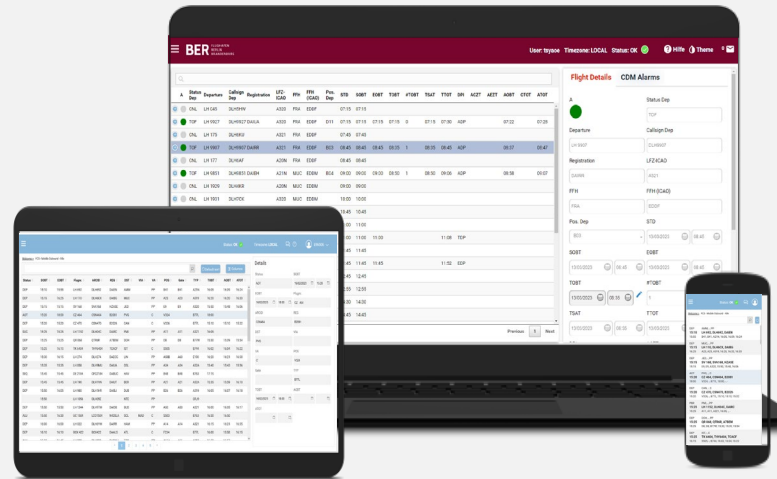
## Airlines/Groundhandlers

- Gate Agents
- Check-in Agents
- Airline Administrator
- Boarding process
- Check-in process



## Other Stakeholders

- Airport Partners which wants to make Advertising in the Airport
- Third party



# Functions: Overview

**01**

## **Resource Module**

- Resource Module provides functionality that needs to be available on Common-use Terminal Equipment (CUTE) workstations.
- Resource Module can also be e.g., deployed at the gates. Handling agents at the gates use the Resource Application on the CUTE workstation at a gate to update the boarding status of a flight.
- Resource Module contains Gate View which offers de-centralized control of a flight's boarding status and displays associated with the gate.
- Resource Module contains Check-In View works similar to Gate View. It handles common check-in as well as flight check-in instead of gate assignments.
- The resource module it is fully integrated into FIDS or RMS combining flight information with resource information.

**02**

## **CMS Module**

**03**

## **Advertising Module**

# Functions

## 01. Resource Module: Gates

- Display the list of gates

Welcome > Gates			
Gates			
Terminal 2			
A1	B10	D34	E44
A2	B11	D35	E45
A3	B12	D36	E46
A4	B13	D37	E47
A5	D30	E40	E48
A6	D31	E41	E49
A7	D32	E42	E50
A8	D33	E43	

# Functions

## 01. Resource Module: Gates Flights

- Display the Flights allocations for selected Gate.



The screenshot displays the 'Gates Flights' section of the Resource App. The top navigation bar is blue and contains a menu icon, the date '00-00-06', the timezone 'LOCAL', a help icon, and a user profile icon labeled 'GDL/ gaallresources'. Below the navigation bar, the breadcrumb 'Welcome > Gates > A1' is visible. The main content area is titled 'Gate: A1' and features a table with flight data. The table has eight columns: 'Scheduled Time Dep.', 'Begin Plan', 'Flight Number', 'End Plan', 'Begin Actual', 'Destination', 'Flight Status', and 'Status'. Three flights are listed: 'AM 792' (highlighted in green), 'AMX 285', and 'VOI 954'.

Scheduled Time Dep.	Begin Plan	Flight Number	End Plan	Begin Actual	Destination	Flight Status	Status
AM 792	07:27 31 May	06:48	07:22	17:03	SLC	Boarding - First Call	B
AMX 285	11:58 31 May	11:23	11:53		NLU		S
VOI 954	16:23 31 May	15:48	16:18		PDX		S



# Functions

## 01. Resource Module: Gate States

- Manage Gate like Open Gate, Close Gate, Make Final Call, assign Message to Gate assign Logo to Gate etc ..

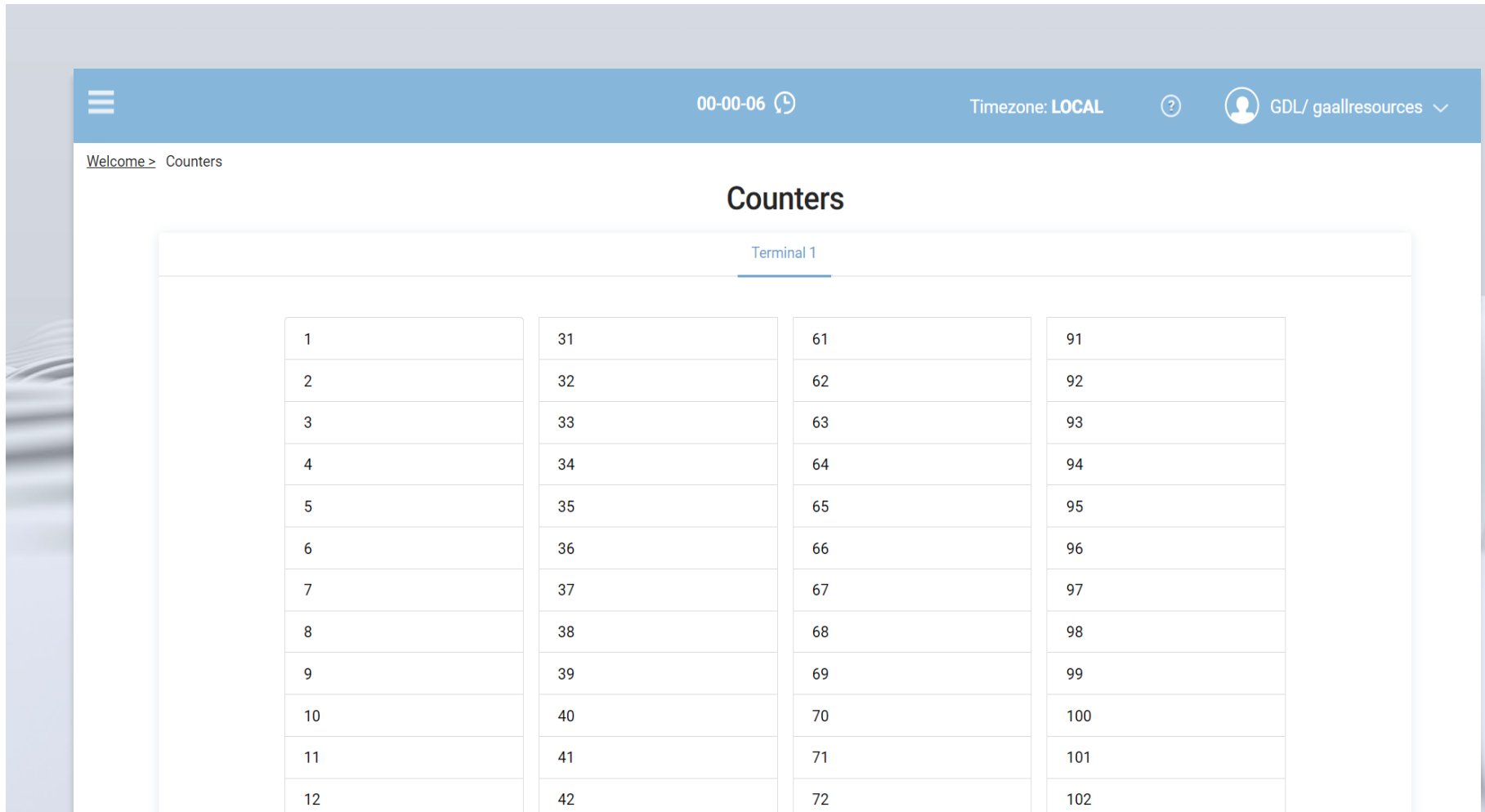
The screenshot displays the 'Gates' management interface for Gate A1. The top navigation bar includes a menu icon, a clock showing 00-00-41, the timezone 'LOCAL', a help icon, and a user profile for 'GDL/ gaallresources'. The breadcrumb trail is 'Welcome > Gates > A1'. The main content area shows 'Gate: A1' with a state of 'Open' (indicated by a green checkmark) and a timestamp 'Since 31 May 17:03'. Below this, a section for 'Flight: AM 792' contains a table with flight details. At the bottom, there are two dropdown menus for 'Message' and 'Choose Logo', a 'Save' button with a checkmark icon, and two action buttons: 'Close Gate' with a close icon and 'Cancel Final Call' with a bell icon.

Flight Number	Scheduled Time Dep.	Begin Plan	End Plan	Begin Actual	End Actual	Called to Gate	Destination	Flight Status	Status
AM 792	31.05.2023 07:27	06:48	07:22	17:03			SLC	Boarding - First Call	B

# Functions

## 01. Resource Module: Counters

- Display the list of counters
- Other functionality it is similar to Gate Management



Counters			
Terminal 1			
1	31	61	91
2	32	62	92
3	33	63	93
4	34	64	94
5	35	65	95
6	36	66	96
7	37	67	97
8	38	68	98
9	39	69	99
10	40	70	100
11	41	71	101
12	42	72	102

# Functions

## 01. Resource Module: CCI

- Display the list of common counters
- Other functionality it is similar to Gate Management

Welcome > CCI

### CCI

Terminal 1

<a href="#">AMX</a> MOSTRADOR AMX CCI	<a href="#">EI</a> EI CCI	<a href="#">LCT</a> MOSTRADOR LCT CCI	<a href="#">SCX</a> MOSTRADOR SCX CCI
<a href="#">SWG</a> MOSTRADOR SWG CCI	<a href="#">SY</a> MOSTRADOR SY CCI	<a href="#">TAO</a> MOSTRADOR TAO CCI	<a href="#">UAL</a> MOSTRADOR UAL CCI
<a href="#">VOI</a> MOSTRADOR VOI CCI			

# Functions: Overview

## 01

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### Resource Module

## 02

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### CMS Module

## 03

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### Advertising Module







- In CMS Module the users can manage messages and announcements of the airport. These messages and announcements can be used by FIDS in the pages for Gates , Counters etc ....
- The CMS module it is fully integrated into FIDS.

# Functions

## 02. CMS Module: Messages







- Display the list of messages
- CRUD actions are available: CREATE, UPDATE, DELETE.
- Message have translations in different Languages

The screenshot displays the CMS interface for the Messages module. The top navigation bar shows the date 00-00-13, the timezone LOCAL, and the user GDL/ gaallresources. The breadcrumb trail is Welcome > Messages >. The main section is titled Messages and contains a table with the following data:

Message	Valid From	Valid To	Airline	Created By	Created Date	Action
Baggage belts area	2023-05-10 19:09:00	2023-05-11 19:09:00		gaallresources	2023-05-09 15:39:26	  
EU passport control	2023-05-09 18:49:00	2023-05-10 18:49:00		gaallresources	2023-05-09 15:19:22	  

Below the table, there is a list of messages: Happy New Year, Happy new 2023 year!, and Passport control. A Create button is located at the bottom of this list.

A modal window is open, showing the Translations section. The top navigation bar of the modal shows the date 00-00-25, the timezone EUROPE/BERLIN, and the user GDL/ gaallresources. The breadcrumb trail is Welcome > Messages > Translations >. The main section is titled Translations and contains a table with the following data:

Message	Translation	Language	Action
EU passport control	EU-Passkontrolle	German	  
EU passport control	Control de pasaportes de la UE	Spanish, Castilian	  

At the bottom of the modal, there are Create and Cancel buttons.






# Functions

## 02. CMS Module: Announcements

- Display the list of announcements
- CRUD actions are available: CREATE, UPDATE, DELETE.
- The announcement contains attributes like on terminal, Landside, ops days, Public Display, Display From – Display To which defines on which area in the airport should be the announcement displayed on the FIDS Monitors.

The screenshot shows the 'Announcements' list view. The header bar includes a menu icon, the date '00-00-15', the timezone 'LOCAL', and the user 'GDL/ gaallresources'. The breadcrumb is 'Welcome > Announcements >'. The title is 'Announcements'. Below is a table with columns: Message, Display From, Display To, ops Days, Terminal, Landside, Public display, Overview, Gates, Checkin, Belt, and Action. A single row is visible with the message 'Happy New Year' and various values. At the bottom left is a 'Create' button.

Message	Display From	Display To	ops Days	Terminal	Landside	Public display	Overview	Gates	Checkin	Belt	Action
Happy New Year	2021-12-30 10:20:00	2022-01-11 10:20:00	0234567	1	B	N	Y	Y	Y		  

The screenshot shows the 'Edit the announcement' form. The header bar is identical to the list view. The breadcrumb is 'Welcome > Announcements >'. The title is 'Edit the announcement'. The form contains several fields: Message (a dropdown menu), Terminal (a dropdown menu with value '1'), Landside (a dropdown menu with value 'B'), ops Days (a text input with value '0234567'), Public display (a dropdown menu), Display From (a date and time picker with value '30/12/2021 10:20'), Display To (a date and time picker with value '11/01/2022 10:20'), Checkin (a checkbox that is checked), Belt (a checkbox that is checked), Overview (a checkbox that is unchecked), and Gates (a checkbox that is checked). At the bottom are 'Save' and 'Cancel' buttons.

# Functions: Overview

## 01

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### Resource Module

## 02

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### CMS Module

## 03

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### Advertising Module

- The advertising module has been developed as a platform for the management of multimedia content, providing numerous functionalities at the level of the user interface, content management and devices.
- The advertising module it is fully integrated into FIDS combining flight information with advertising content.

# Functions

## 03. Advertisement Module: Media

- Display the list of media files
- We can upload media files like Airline Logos or Advertising Content

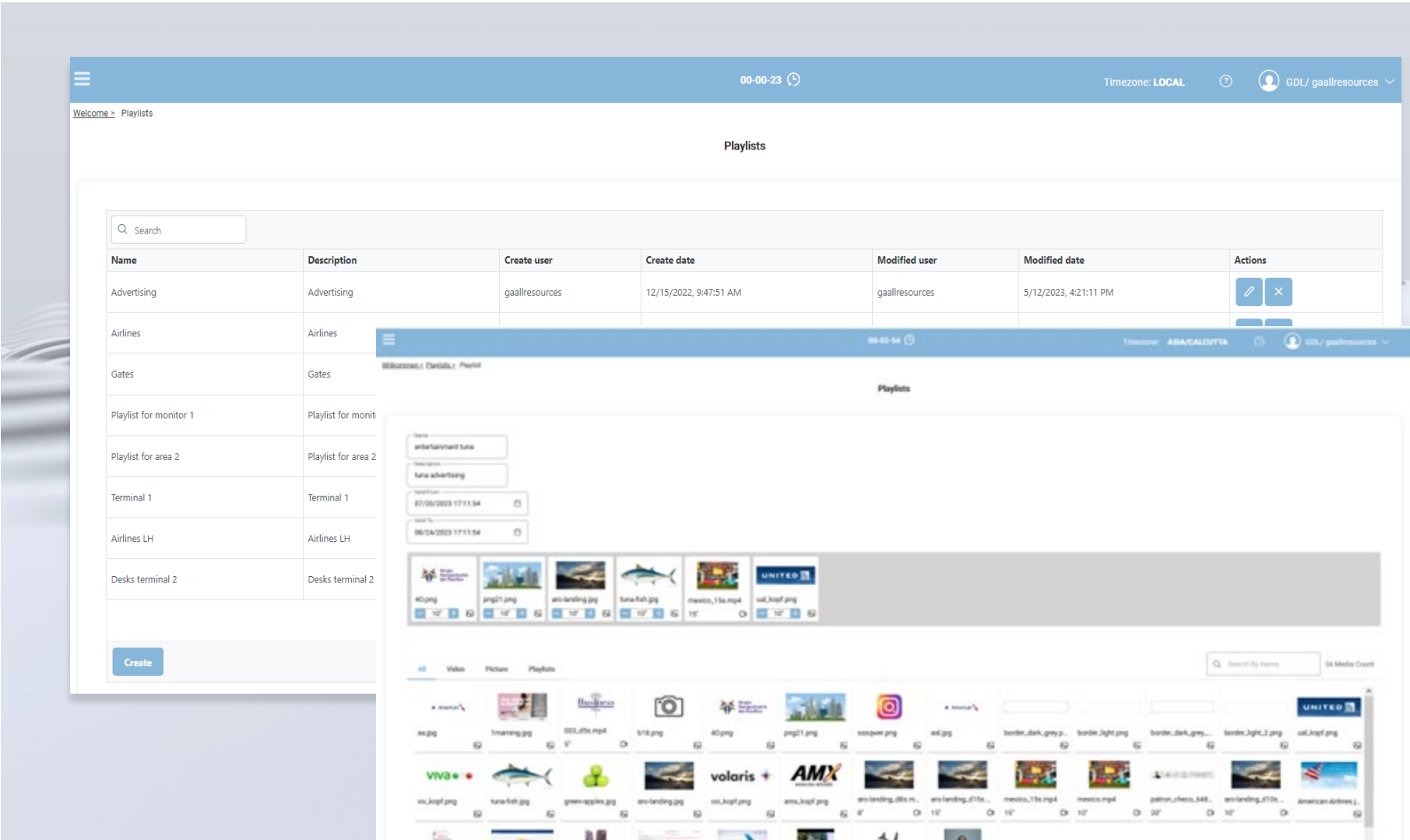
The screenshot shows the 'Media' management interface. At the top, there's a blue header bar with a menu icon, the date '00-02-26', the timezone 'LOCAL', and a user profile 'GDL/ gaallresources'. Below the header, a breadcrumb trail shows 'Welcome > Media'. The main content area is titled 'Media' and contains a search bar and a table of media files. The table has columns for File ID, Type, File Name, Logo No., Advert, Width, Height, and Comment. Five rows of data are visible, all with 'image' type and various file names and IDs. Below the table, it says 'Showing 801 to 805 of 805 entries'. At the bottom, there's a pagination control showing page 41 of 41, and a row of buttons: 'Create', 'Update', 'Remove', 'Duplicate', and 'Save'.

File ID	Type	File Name	Logo No.	Advert	Width	Height	Comment
ZLO_032	image	zlo_032.jpg	1811	<input type="checkbox"/>	1920	1080	
ZLO_033	image	zlo_033.jpg	1812	<input type="checkbox"/>	1920	1080	
ZLO_034	image	zlo_034.jpg	1813	<input type="checkbox"/>	1921	1081	
ZLO_035	image	zlo_035.jpg	1814	<input type="checkbox"/>	1920	1080	
ZLO_036	image	zlo_036.jpg	1815	<input type="checkbox"/>	1920	1080	

# Functions

## 03. Advertisement Module: Playlists

- Display the Plalists, either a list of videos or a list of pictures with duration can be assigned to a Playlist



# Functions

## 03. Advertisement Module: Channel View

- Display the list of channels
- CRUD actions are available: CREATE, UPDATE, DELETE.
- A channel contains the planning which playlist should be displayed on the specified timeslot.

The screenshot displays the 'Channel View' interface of the Resource App. The top navigation bar shows the date '00-04-11', the time zone 'EUROPE/BERLIN', and the user 'GDL/ gaallresources'. The main content area is divided into three sections:

- Channels:** A list of channels with a search bar. The selected channel is 'Channel Desks'. Other channels listed include 'Channel baggage belts monitor', 'Channel Gates', 'Channel for Airline LH', 'NewJmsChannel', and 'VRS\_TEST'.
- Calendar:** A calendar view showing the months of September, October, and November 2023. The timeline below the calendar shows the schedule for the selected channel, with slots for 'Airlines' and 'Adve' (Advertisement) at various times.
- List:** A list of playlists and monitors, including 'Airlines', 'Advertising', 'entertainment tuna', 'new\_playlist', 'Playlist for area 2', 'Playlist for monitor 1', 'Gates', 'newtimezonetest', 'Playlist for duration', 'Desks terminal 2', 'Airlines LH', 'Playlist with India TZ', 'CreatePlforJms', 'Terminal 1', 'Pvr Admin', and 'Baggage Belts Monitors'.

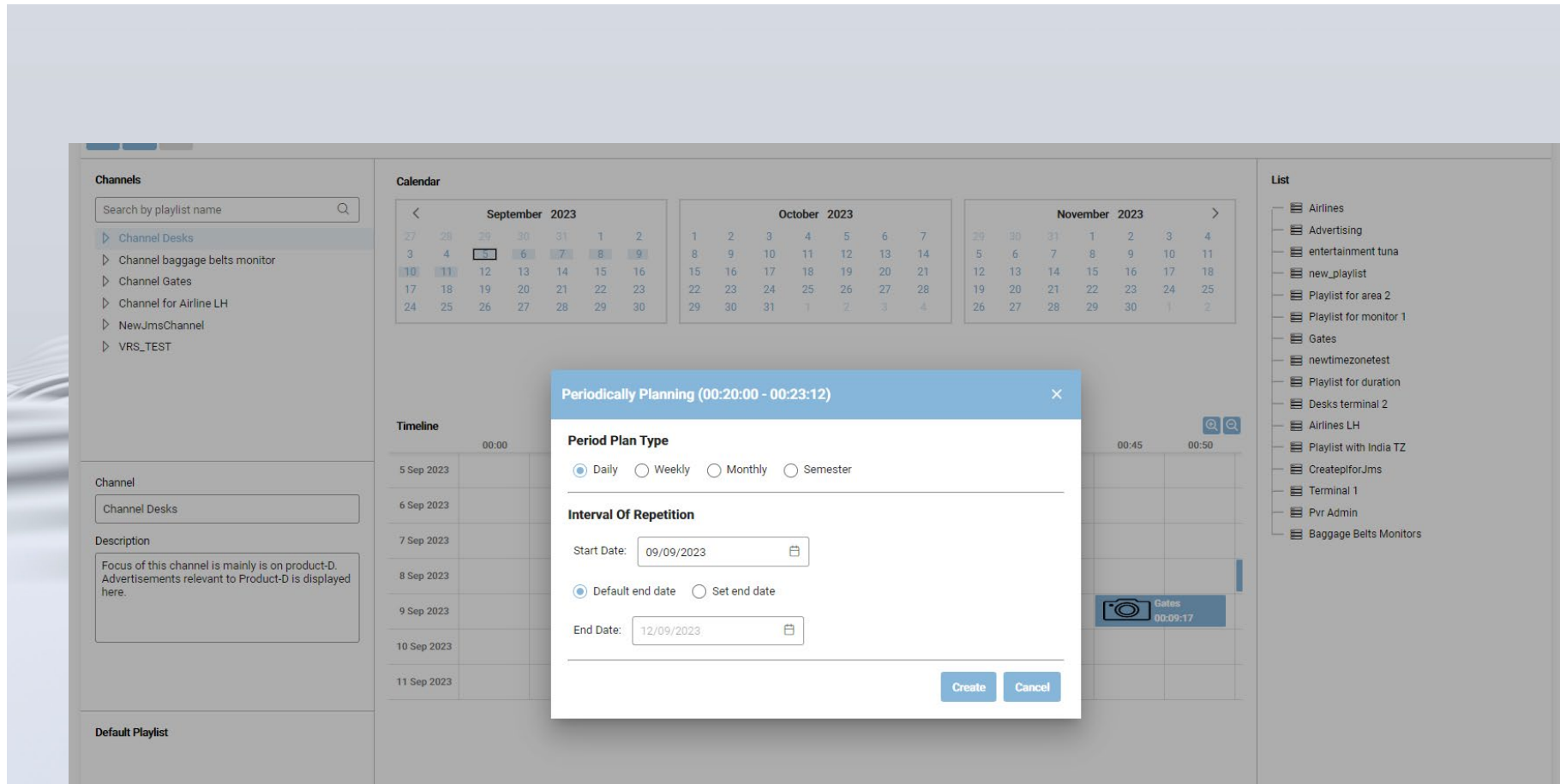
The 'Default Playlist' section at the bottom left shows a thumbnail for 'Advertising' with a duration of 00:03:12.



# Functions

## 03. Advertisement Module: Channel View- Periodical planning

- Periodical planning:
- Daily
- Weekly
- Monthly
- Semester



# Functions

## 03. Advertisement Module: Tuning View

- Display the list of tuning
- CRUD actions are available: CREATE, UPDATE, DELETE.
- One Tuning object contains the assignment Monitor Field -> Channel.

The screenshot displays the 'Tuning View' interface within the Resource App. The top navigation bar is blue and contains a menu icon, the date '00-00-20', the time zone 'Timezone: LOCAL', a help icon, and a user profile icon labeled 'GDL/ gaalresources'. Below the navigation bar, the breadcrumb 'Welcome > Tuning View >' is visible. The main content area is titled 'Tuning View' and features a toolbar with four circular icons: a plus sign, a refresh icon, a funnel, and a play button. The interface is divided into two main sections. On the left, the 'Monitors' section includes a search bar labeled 'Search by monitor name' and a list of monitor names: 'F1-FID-MON-33', 'DJACO-Q4DE3QSV480', 'F1-FID-MON-32', 'WEBIS3\_ACTS23\_IP', and 'F1-FID-MON-31'. Below this list is a form for creating or editing a monitor, with fields for 'Monitor', 'Identification', 'IP', 'Resolution', and 'Startup Page'. On the right, the 'Tune channels in geometries' section contains a form with fields for 'Column Field' (a dropdown menu showing 'Column Name'), 'Coordinates', 'Dimensions', 'Remark', and 'Channel' (a dropdown menu showing 'Select a Channel').

### 03. Advertisement Module: FIDS GUI – Layout Editor

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- The screenshot shows the 'M920 Graphic Layout Editor' window. A 'Field' dropdown is set to 'HEADER::ARR\_PIKOGRAMM[1]'. The main workspace displays a grid layout with flight data. A 'M924 Column Properties' dialog box is open, showing the 'General' tab. The 'Frame' is 'HEADER', the 'Column' is 'ARR\_PIKOGRAMM', and the 'Comment' is empty. The 'Definition' is 'NewMedia13'. The 'Effect' is empty. The 'Field rule' is empty. The 'Page rule' is empty. The 'Content control' is set to 'Graphic' (indicated by a red arrow). The 'Content control' checkbox is checked. The 'OK', 'Cancel', and 'Apply' buttons are at the bottom.

# Functions

## 03. Advertisement Module: Advertisement Report

- Display the list of advertising activities
- If one advertising content runs on one monitor this report provides the proof and can be used for billing

00:00:51

Timezone: EUROPE/BERLIN

Welcome > Advertisement Report

Advertisement Report

Filter

Event Time From: 06/01/2023 09:59:27

Event Time To: 09/05/2023 09:59:27

Channel: Select a Channel

Playlist: Select a Playlist

Device: Select a Device

Page: Select a Page

Load Data

Search

Playlist ↑↓	Channel ↑↓	Device ↑↓	Event Time	Page Name ↑↓	Layout ↑↓	Frame ↑↓	Frame Row ↑↓	Column ↑↓	Sheet ↑↓	Content ↑↓	Previous Content ↑↓
Airlines	Channel for Airline LH	FB-FID-MON-49	6/1/2023, 12:13:45	9903	KUT_PUB_ARR_DEP_LIST	BDY_BASE_SHUTTER_4X50	1	WERBUNG1	HH_SHEET1	ARR.PA_BIBT	ARR.PA_FLIGHTNUMBER
Playlist for monitor 1	Channel baggage belts monitor	FB-FID-MON-47	6/2/2023, 17:35:07	9905	DMCLL_INT_ARR_DEP_LIST	BDY_BASE_SHUTTER_4X50	2	WERBUNG1	HH_SHEET1	ARR.PA_BIBT	PAGES1.PA_REMARK
Gates	Channel Gates	FB-FID-MON-49	8/1/2023, 23:03:46	9904	DMCLL_INT_ARR_DEP_LIST	LINEBACKGROUND	1	EIBT_ALDT	ALL	ARR.PA_RSTA_REFSTAND	ARR.PA_RAP_ORIGINAIRPORT

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**Questions ?**



# Thank you!



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