DATA MODUL

maXcs®

management administration communication system

The CONRAC Information System

Innovation. Experience. Flexibility. Quality.

INTRODUCTION

In the fast-moving airport environment, up-to-date information at the right time and place is absolutely vital.

A modern airport without an advanced flight information display system providing high visibility flight, staff and baggage information is totally unthinkable. Large screen displays guiding the passengers have become a necessity.

Static advertising is gradually being substituted by digital large screen displays offering entirely new possibilities. A flexible mixture of sales promotion, video-clips and films is much more of an eye-catcher than any other type of advertising - infotainment rather than just advertising - a new source of future profit growth for the airports and a pleasant pastime for the passengers while waiting for their flights.

Our challenge is to provide our clients with the system solutions best fitted for their individual requirements. This means the ideal display technology, size, format, resolution for the information to be communicated: Smaller sizes for check-in, mid-size for flight information or advertising, large screens for arrivals or departures, with extra intelligence, e.g. an embedded controller, if required. This also means bespoke design, colour, company or product logo to suit airports', retailers' and architects' plans.

Founded in 1956 CONRAC has always provided innovative technology. Ever since the late 60's, CONRAC has been developing information display products for the most demanding applications. From the first information boards, first flight information display systems, first microprocessor-based data terminals, the first high resolution CRT monitors to today's flat panel displays, CONRAC has at all times played a pioneering role in the airport business. Tens of thousands of public displays in over 250 airports worldwide speak for themselves.

CONRAC GmbH has been part of the DATA MODUL Group for many years. In 1998, DATA MODUL AG, Munich, the top technology partner for display technology in Europe, decided to supplement their product range and acquired the experienced specialist for information display systems. In October 2013 CONRAC GmbH was renamed in DATA MODUL, CONRAC remaining as a brand name.

Thanks to an advanced R&D Department with unique expertise and a Product Management with global market knowledge, the DATA MODUL Group always keeps a step ahead. Committed to technologically advanced and cost-effective display solutions, we constantly improve existing products and develop new products and solutions, using only the latest and most reliable technologies.

All our products are developed for 24/7 operation. The components and solutions have been designed and thoroughly tested for applications in the most demanding environments. Furthermore, compliance with very strict quality regulations, monitored at all stages of the production process ensures optimum performance and reliability.

DATA MODUL is, of course, an ISO 9001 & 14001 certified organisation.

1. INTELLIGENT INFORMATION SYSTEM: maXcs®

Completing our range of airport-related equipment, we offer a sophisticated Flight Information Display System scalable to any size of installation. It is the ultimate software solution to drive and control the DATA MODUL series of professional embedded flat-screen displays.

maXcs® is a highly innovative and future-proof product, easily adaptable to new operational needs at airports. System design in close co-operation with the customer ensures a smooth operation and guarantees timely and reliable information of passengers and staff, trouble-free passenger handling as well as efficient and reliable procedures for freight and baggage handling.

maXcs®, our passenger information system, offers state-of-the-art technology: Advanced features such as decentralised maintenance, remote status monitoring, flight tracking, wireless applications for operators, and many more.

maXcs® controls all modern media and offers full graphic and multimedia capabilities. The Designer and Page Configuration Tool described later on allow easy and efficient handling of all possible contents for the public displays.

Data handling is realised by standard database applications giving the customer the free choice. All interfaces are based on XML, SQL or ODBC standards.

Fundamental Principle

- Flexible cost-effective system
- Fulfils customer requirements
- Uses modern network architecture
- Drives all available displays and server hardware
- Takes into account future hardware developments
- Uses hardware platforms designed for high availability

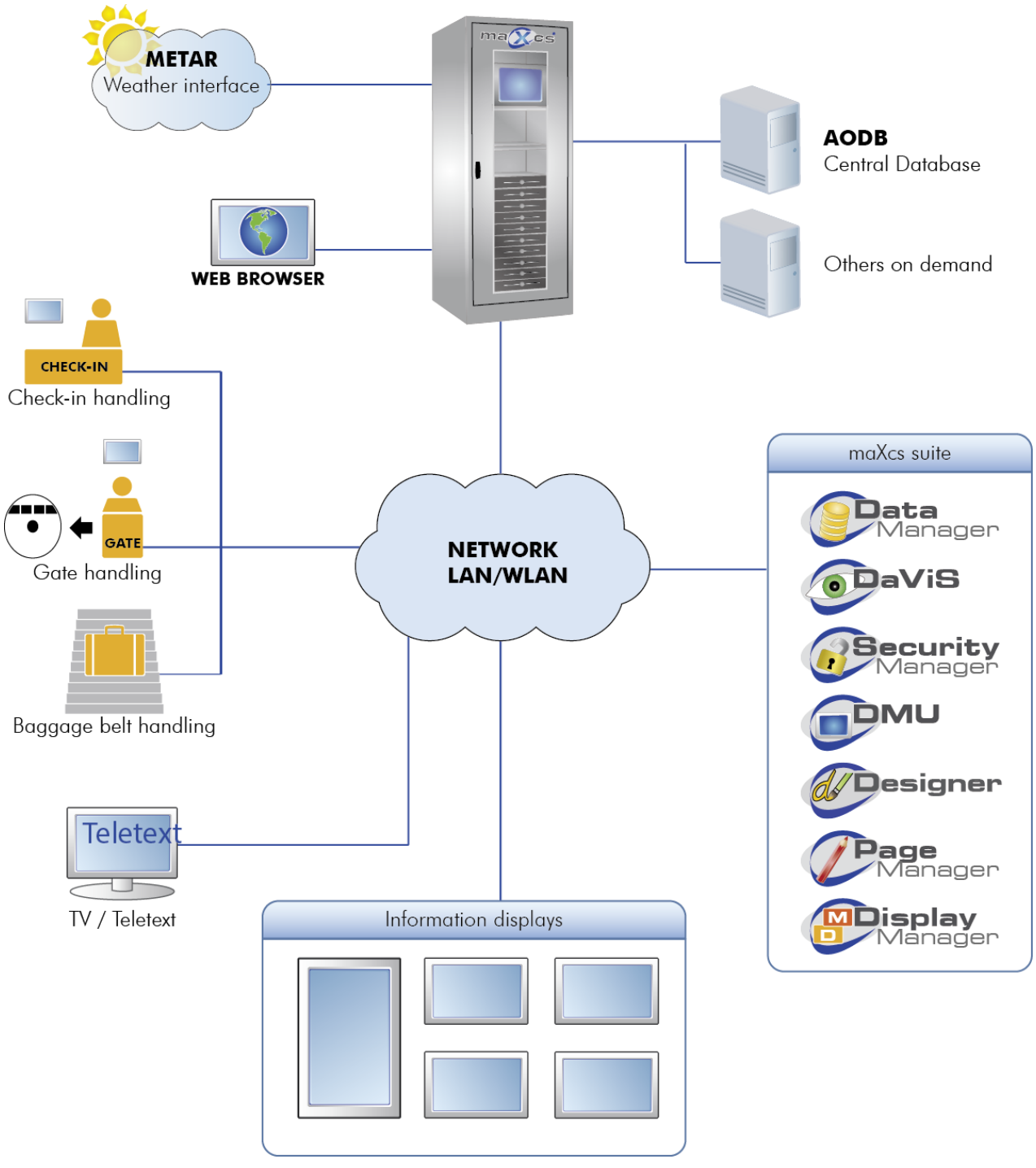
Individual Benefits

- Configurable standard products
- Our software is applicable to any size of system
- Feasible with the operational structure of a project
- Applications are designed for integrated systems

Modular Concept

- System structure is divided into several segments
- Object oriented software platform
- Data transfers are optimised/reduced to a minimum to avoid network bottlenecks
- System can grow with the requirements of an airport

2. SYSTEM LAYOUT



3. THE maXcs® SYSTEM-SERVER ENVIRONMENT

3.1 Main Tasks

- Interface handling: Individual interfaces to external systems (interactive data exchange based on XML, text, etc. standards)
- Data distribution
- Handling of the seasonal flight schedule
- Generates the daily flight schedule
- Generates management reports
- Generates archive files
- System maintenance

3.2 Main Processes on Server Level

Information Management Process

- Rule-based information broker for data consistency

Distribution Management Process

- Monitoring of all connected devices
- Event-driven update service guarantees minimum network load

System Management Process

- Guarantees reliable operation of the server and network
- Starts and restarts application processes (“Watchdog”)
- Reports status of the system and all display devices
- Responsible for fault tolerant error handling and notification
- Controls “Hot stand-by” functions
- Monitors system availability

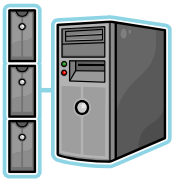
Database Management Process

- Processing of seasonal and daily flight schedules
- Event-driven notification of other processes and interfaces

3.3 Server Hardware Concept

Active Server Master / Slave /Hot Stand-by

The master system acts on the highest operational level and is responsible for data processing, distribution and data consistency.



The number of servers depends on the overall system size.

One server in a cluster can be configured as a Hot Stand-by server. Its task is to monitor the other server/servers and to take over in case of a hard- or software failure. A watchdog process is implemented to secure a “hot-switching” of the CPUs.

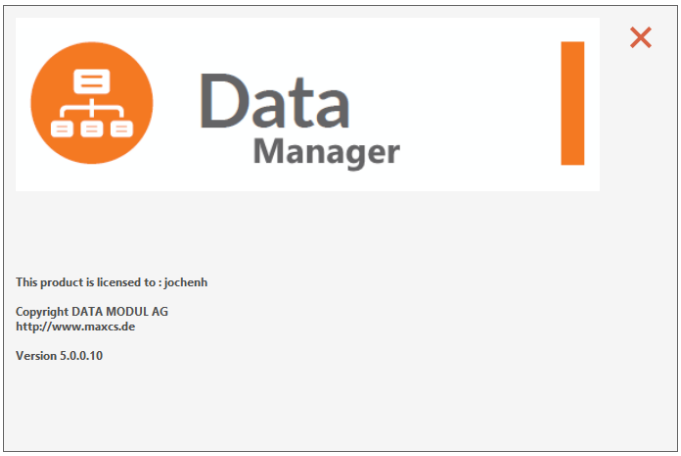
By using VM Ware® the system provides the freedom to configure a virtual server architecture independent of the used hardware.

Minimum Server Requirements

- X86 -based Standard Server platform (rack or tower version)
- Operating System:
    - LINUX Suse SLES 10/11/12/15
    - or Windows™ + VMWare®
    - database application based on Postgre SQL
    - ORACLE on request

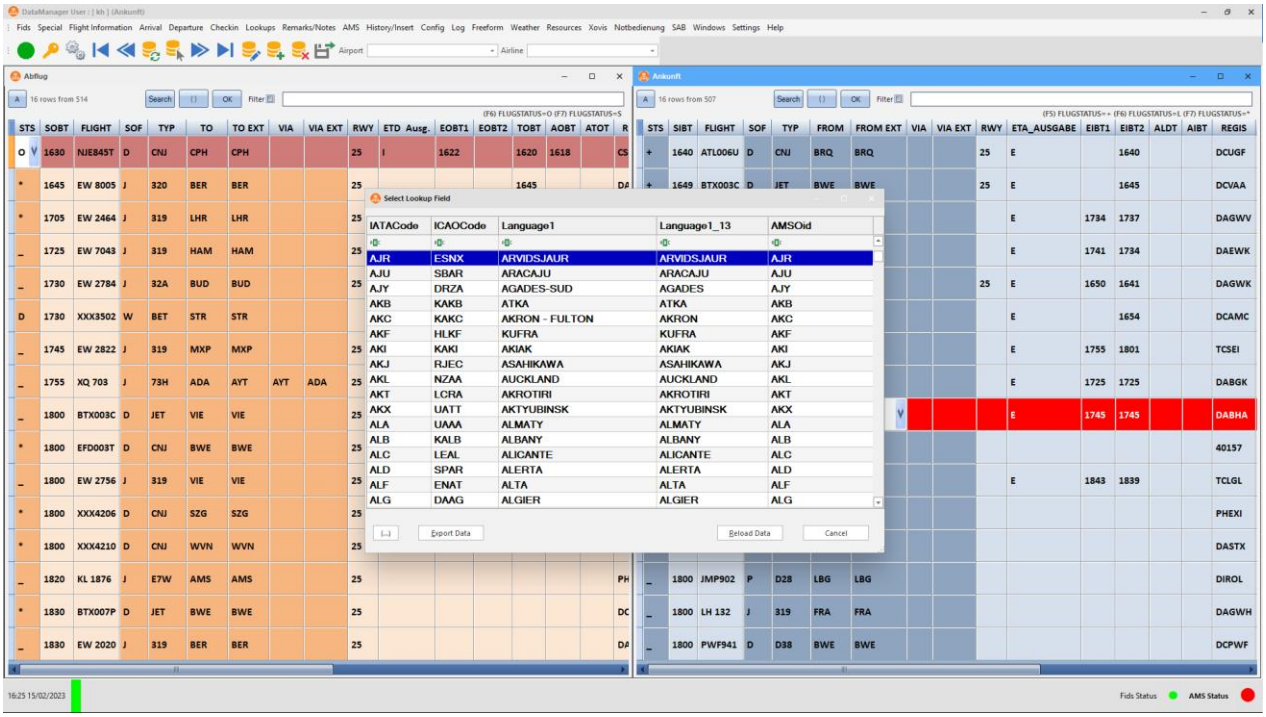
4. maXcs® System Data Management and Administration

4.1 Data Manager – System Operation / Operator Console



Splash screen

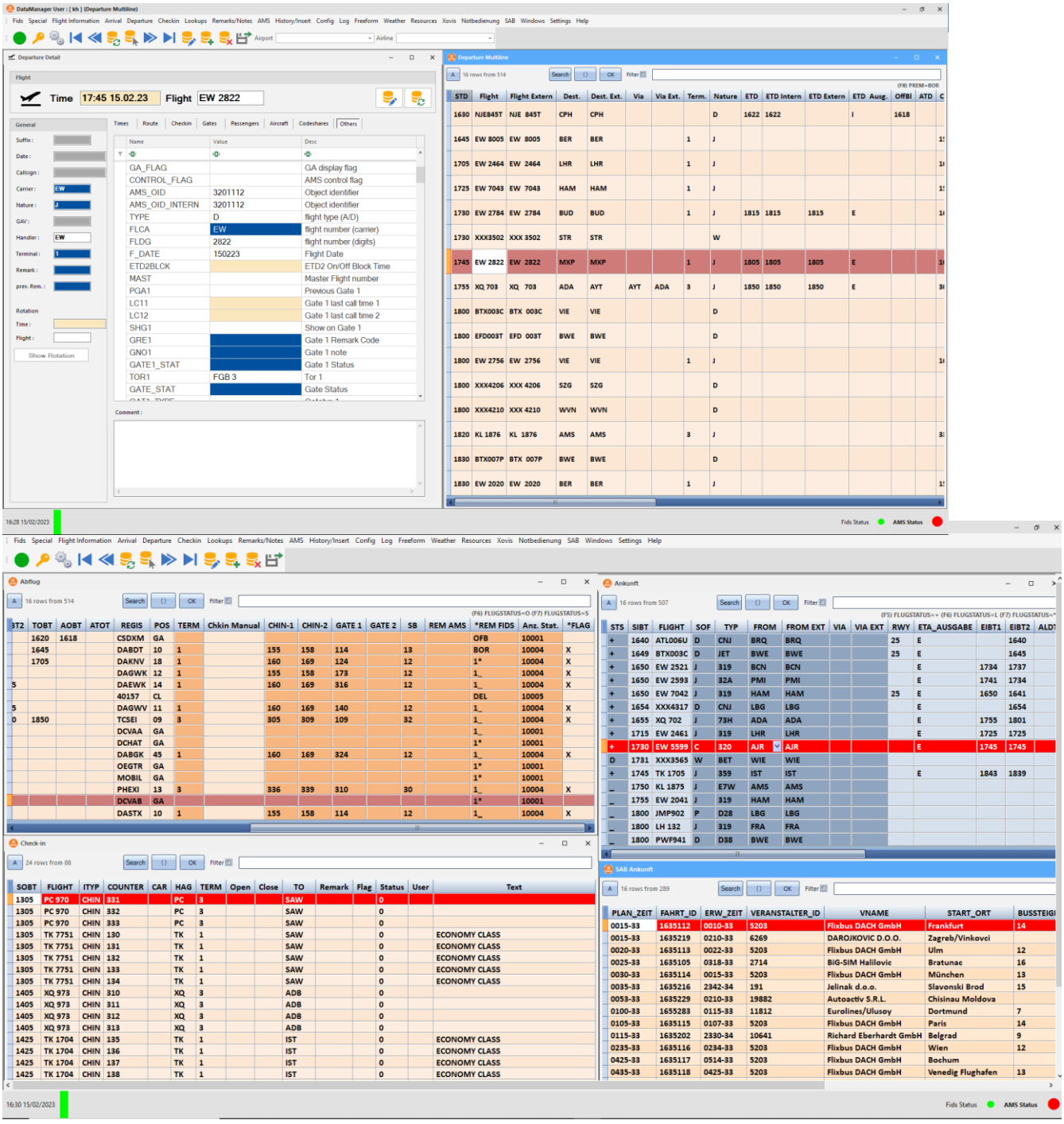
The Data Manager is a dedicated application within the software suite.
It provides the system administrator / operator with an overview and access to all current data, event and status information available (daily flight plan). It is installed on a standard workstation based on a MS Windows operating system environment. The user friendly application provides all modern tools and multi-functionality that everyone is used to, on a MS Windows platform.



Info window example

Tasks:

- Editing of seasonal and daily flight plan, lookup data, etc.
- User access via user profile (ID and password)
- Configuration of user specific interface layouts (design, columns, sequences, colour)
- Storage of user configurations/profiles/layouts
- Multi-window display (Docking Window Style)
- Search and filter functionality

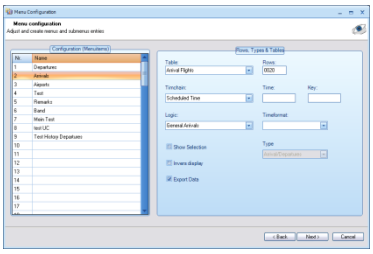


4.2 DAVIS – Information System for internal Staff and Agents

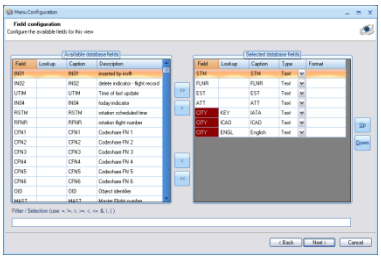
Splash screen

Airport staff requires timely information about the on-going flight movements. This information is provided by DaViS (**Da**ta **Vi**sualization **S**taff). It allows the viewing of flight information, lookup tables, history flights and season-preview flights of the entire **maXcs®** database. The tool can be installed on any existing workstation.
The intention of the application is to provide information only. Manipulation of data is not possible.
The configuration of each terminal depends on the individual user that is connected (personal profile).
The user access is controlled via user ID and password.
The following tasks will be available dependent on the individual user ID:

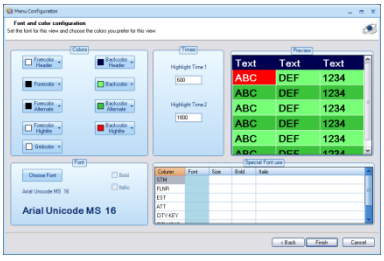
- Field selection from the database record to which the individual user has access
- Selection of lookup-tables to which the individual user has access
- Printing of individually designed views on local or network printers
- "Save to disk mode" for generating additional reports such as history flights, database preview, etc.
- The type of flight records to be displayed e.g. arrivals, departures or flights of specific carriers
- 3-step-setup to generate a new layout for a user:



Step 1 choose database



Step 2 select database fields

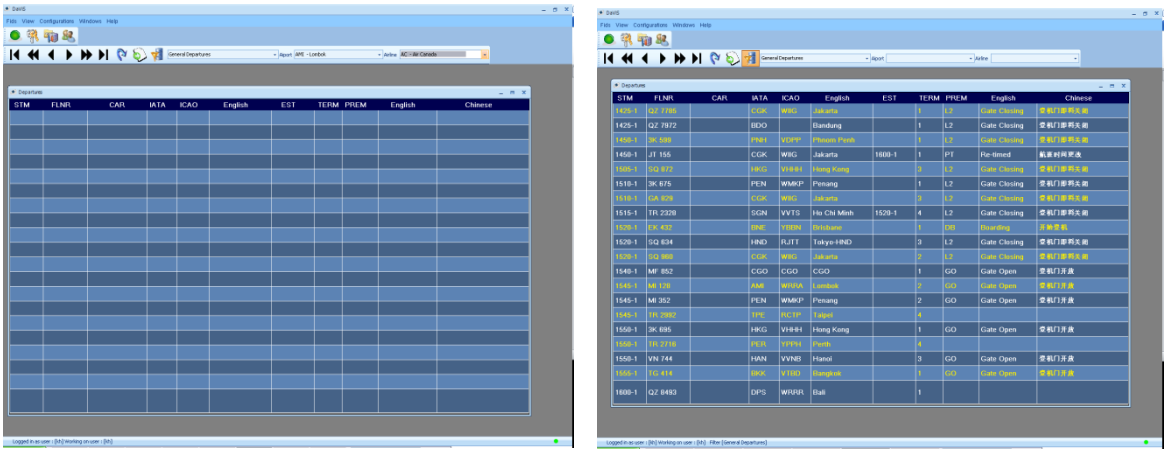


Step 3 define colours & fonts

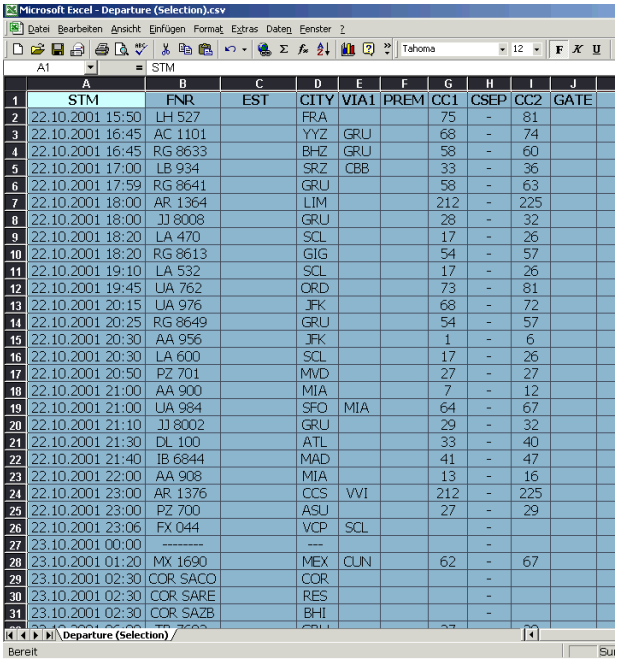
All users are able to define their own individually designed desktop layouts based on their personal profile. The configuration information is stored on the server and will be available with the next login of this user – independent of which workstation is used for login.

Example of layout options:

- Scrolling through the database
- Printing of selected fields and tables
- Export of data in files to work with 3rd party programs such as MS Excel
- Activation of online filters (what-if)
- Monitoring of event updates from the database with highlighted fields



Same view with different filters applied



	A	B	C	D	E	F	G	H	I	J
1	STM	FNR	EST	CITY	VIA1	PREM	CC1	CSEP	CC2	GATE
2	22.10.2001 15:50	LH 527		FRA			75	-	81	
3	22.10.2001 16:45	AC 1101		YYZ	GRU		68	-	74	
4	22.10.2001 16:45	RG 8633		BHZ	GRU		58	-	60	
5	22.10.2001 17:00	LB 934		SRZ	CBB		33	-	36	
6	22.10.2001 17:59	RG 8641		GRU			58	-	63	
7	22.10.2001 18:00	AR 1364		LIM			212	-	225	
8	22.10.2001 18:00	JJ 8008		GRU			28	-	32	
9	22.10.2001 18:20	LA 470		SCL			17	-	26	
10	22.10.2001 18:20	RG 8613		GIG			54	-	57	
11	22.10.2001 19:10	LA 532		SCL			17	-	26	
12	22.10.2001 19:45	UA 762		ORD			73	-	81	
13	22.10.2001 20:15	UA 976		JFK			68	-	72	
14	22.10.2001 20:25	RG 8649		GRU			54	-	57	
15	22.10.2001 20:30	AA 956		JFK			1	-	6	
16	22.10.2001 20:30	LA 600		SCL			17	-	26	
17	22.10.2001 20:50	PZ 701		MVD			27	-	27	
18	22.10.2001 21:00	AA 900		MIA			7	-	12	
19	22.10.2001 21:00	UA 984		SFO	MIA		64	-	67	
20	22.10.2001 21:10	JJ 8002		GRU			29	-	32	
21	22.10.2001 21:30	DL 100		ATL			33	-	40	
22	22.10.2001 21:40	IB 6844		MAD			41	-	47	
23	22.10.2001 22:00	AA 908		MIA			13	-	16	
24	22.10.2001 23:00	AR 1376		CCS	VVI		212	-	225	
25	22.10.2001 23:00	PZ 700		ASU			27	-	29	
26	22.10.2001 23:06	FX 044		VCP	SCL			-		
27	23.10.2001 00:00	--------		---				-		
28	23.10.2001 01:20	MX 1690		MEX	CUN		62	-	67	
29	23.10.2001 02:30	COR SACO		COR				-		
30	23.10.2001 02:30	COR SARE		RES				-		
31	23.10.2001 02:30	COR SAZB		BHI				-		

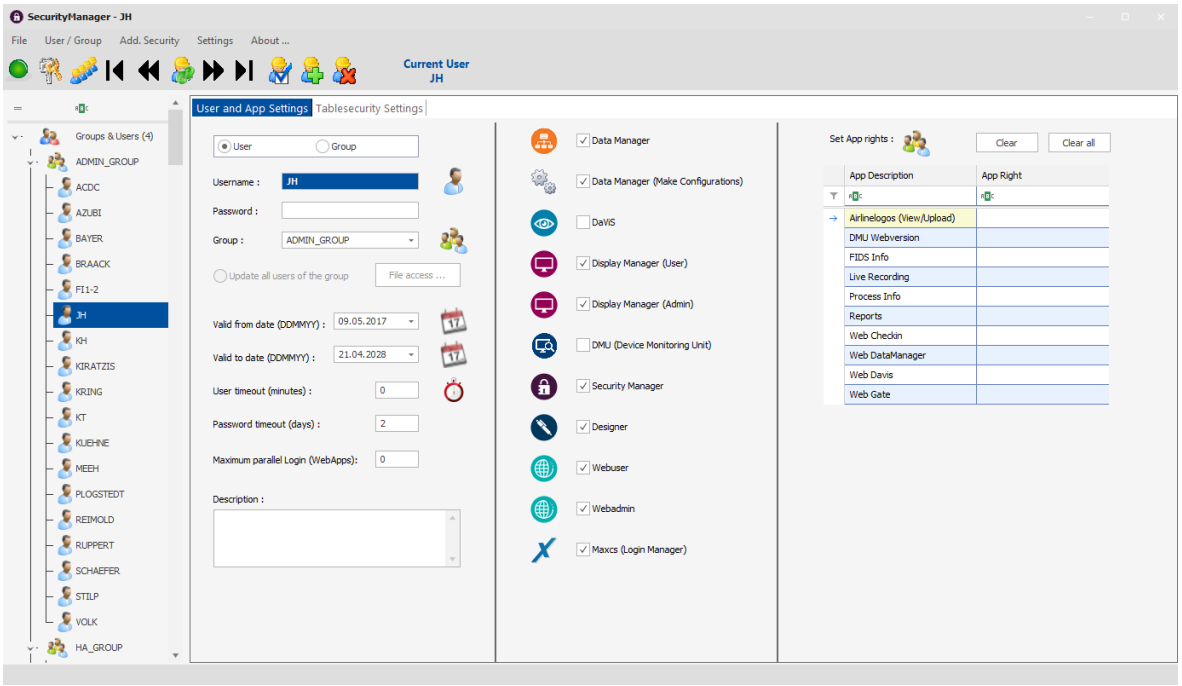
Exported data into MS Excel

5. maXcs® SYSTEM SECURITY / USER ACCESS RIGHTS

5.1 Security Manager – The tool for system security

Splash screen

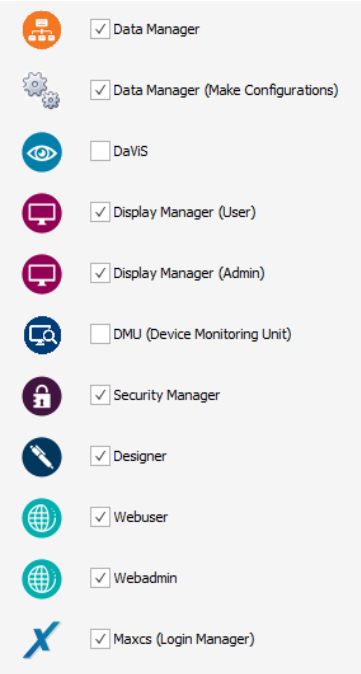
The application “Security Manager” within the program suite allows to setup individual user accounts and to define individual access rights. Access rights are assigned on application level, data base level, data table level and data field level.



Security Manager Screenshot

5.2 Application access control

This tool shows all applications installed within the program suite. For each user the accessible applications are defined by using the tick boxes.



5.3 System Messages / Error Message Logging

Dedicated watchdog processes monitor the smooth operation of the system. Errors in individual processes or any event in the system can be configured to generate a message to be stored in the system log files. The access to these log files is provided via the system console and also via a dedicated WEB-Service (Message/Error Logging via WEB; see below)

Each system message to be stored in the log files can be copied individually and sent via email to dedicated system administrators. This secures a very efficient way of information distribution.

6. maXcs® DISPLAY - ADMINISTRATION / -CONTROL AND / -MAINTENANCE

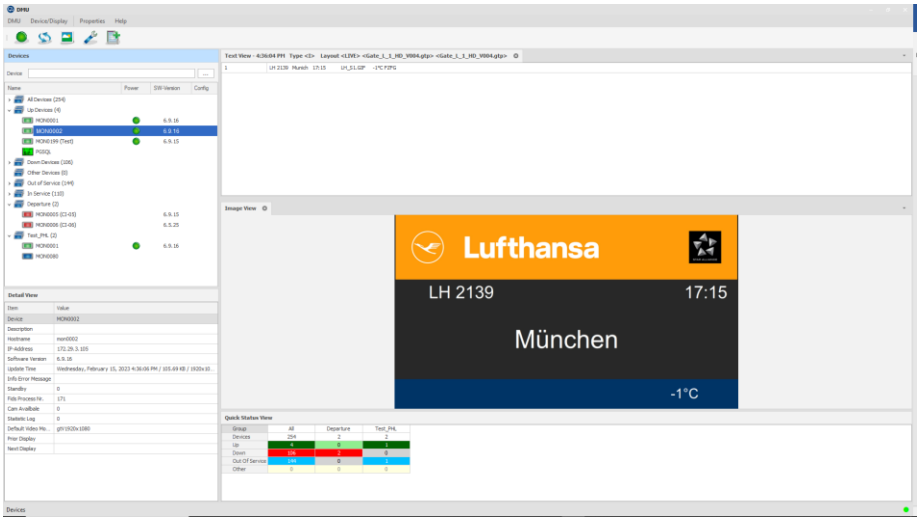
6.1 DMU – Administration and Monitoring of Display Devices

Splash screen

The DMU (Device Monitoring Utility) allows the system administrator to monitor and control all status information provided by the public displays connected to system on hardware level (read-back function).

DMU allows:

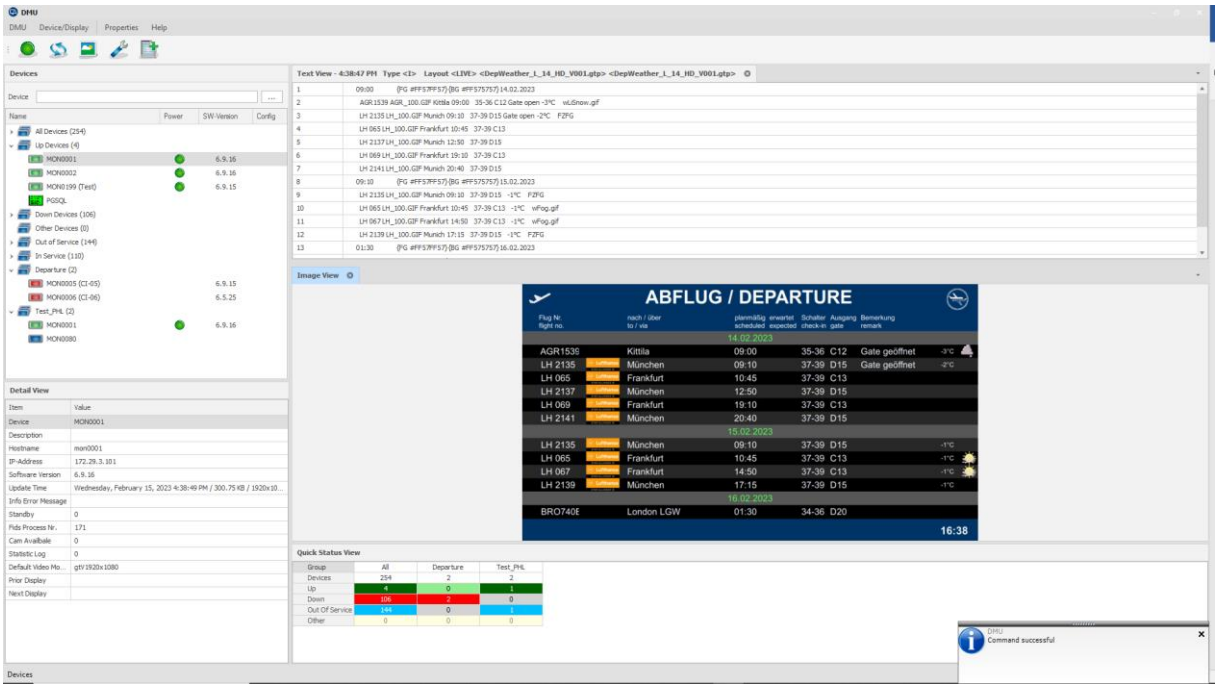
- Remote viewing of display content (displays with integrated Controller)
- Remote viewing of display content of LCD/LED and Split-Flap Boards
- Reboot, switch on/off
- Set devices to "in/out of service"
- Monitoring status of all devices/displays using graphical icons
- Creation of owner groups in device lists for faster access
- Monitoring of display contents in a separate window on the desktop
- Retrieve detailed information for every device/display (operating temperature, status and speed of fans, status of CPU and memory load, etc……)



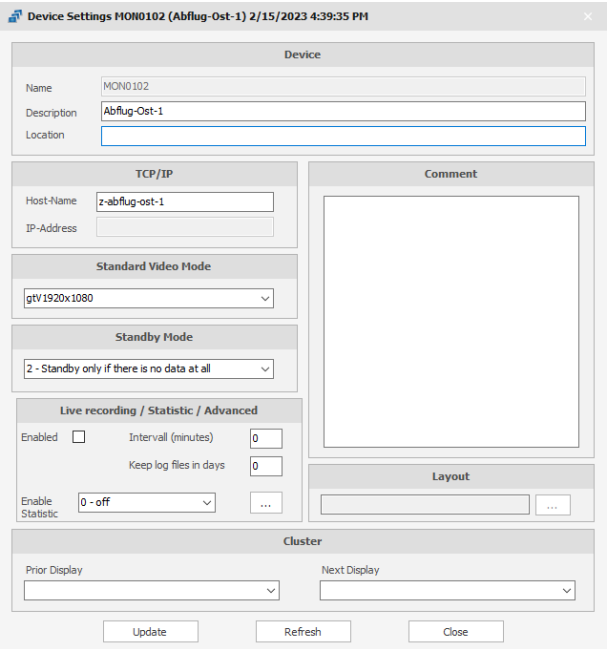
Customized Device-Tree with activated Display view

DMU is able to run on each workstation connected via TCP/IP (LAN or dial-up). It is designed to be used by the following operational staff:

- System administrator on site (to check and control the devices via LAN)
- System administrator with remote access (see DMU Web Version)

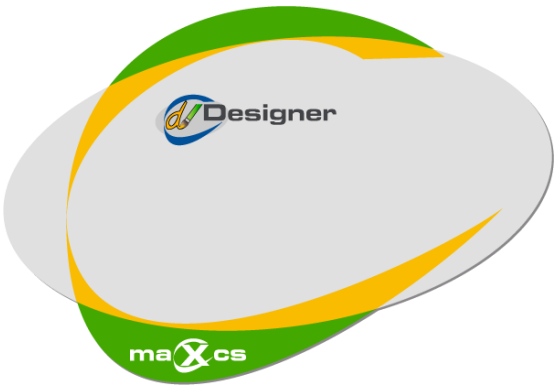


Typical DMU view with a screenshot of a display device and the logical text view of its content



Configuration dialog to change a setting of a display device

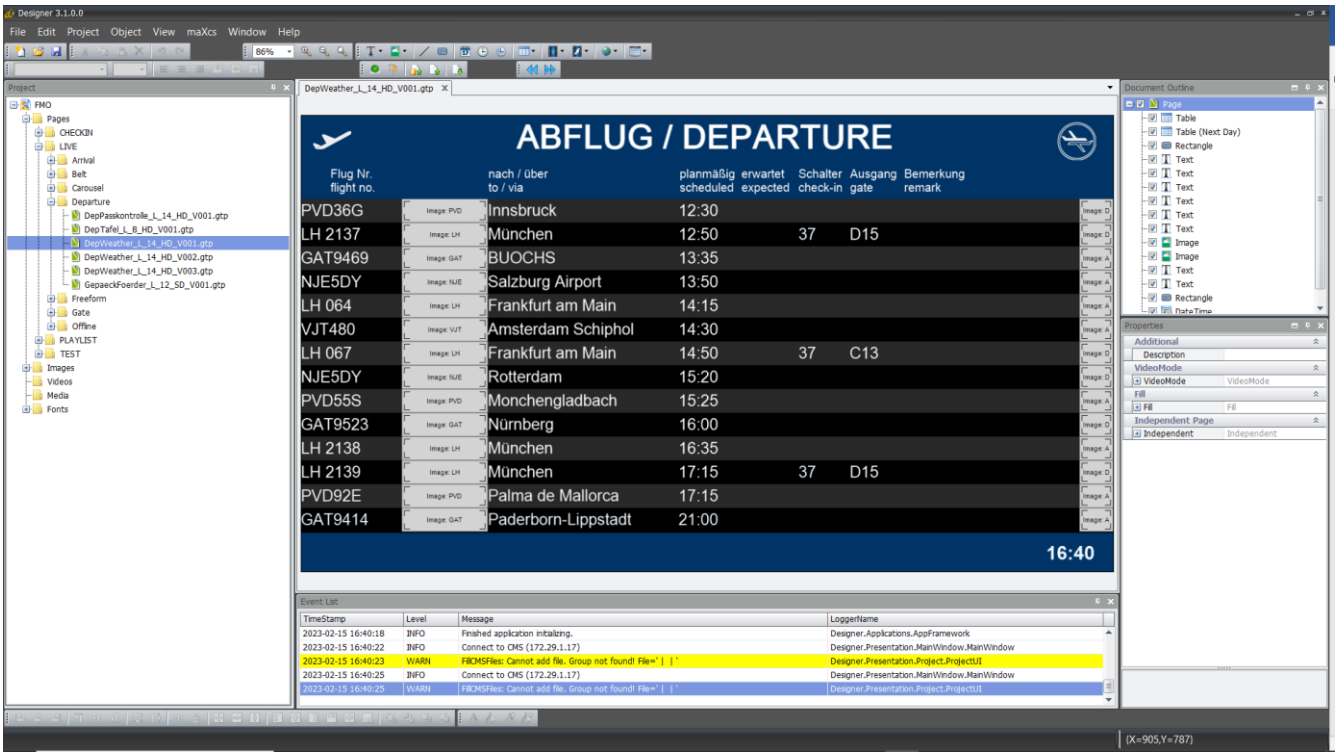
6.2 Designer



Splash screen

The Designer is a key component of the system. It is required to create content templates for the public displays connected to the system. The Designer allows to integrate text content, pictures, videos and flash animations. The designer provides a "What You See is What You Get" interface: The displayed dynamic information page(s) are identical with the content created with the Designer. When using page carousels, a synchronous display of the same information at the same time on different displays is supported.

The designer allows to associate database fields to a template for real-time information



Preview of a ready page layout

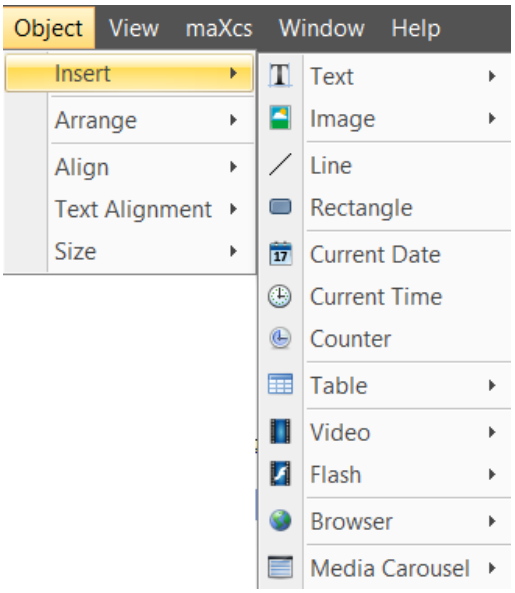
Features and Supported Formats of the Designer

- Background filling styles / page properties
- Insertion and change text fields
- Drawing possibilities (lines, rectangles, ellipses)
- Time & date styles
- Graphic images (JPEG, GIF, BMP, TIFF as well as PNG format)
- Window to display MPEG1, MPEG2 and DVD (*.vob)
  Supports full screen as well as scalable (PIP) MPEG/DVD
- Window to display TV
- Window to display streaming video
- Table of data from system database files
- Window to display swf files
- Ticker table of data from system database files

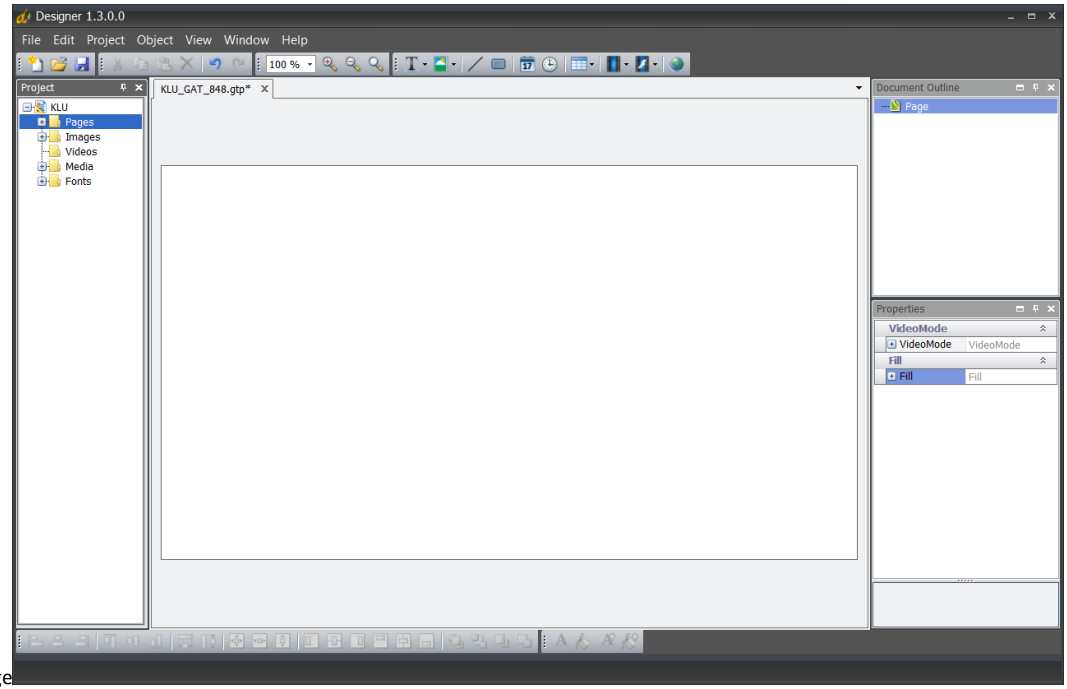
Page Carousel

It is also possible to create page carrousels (pages to be displayed in a loop) for all or selected displays connected to the system. Each page can have its own display time. The end of the display time can be triggered at the end of MPEG video files. Transition effects between pages are supported.

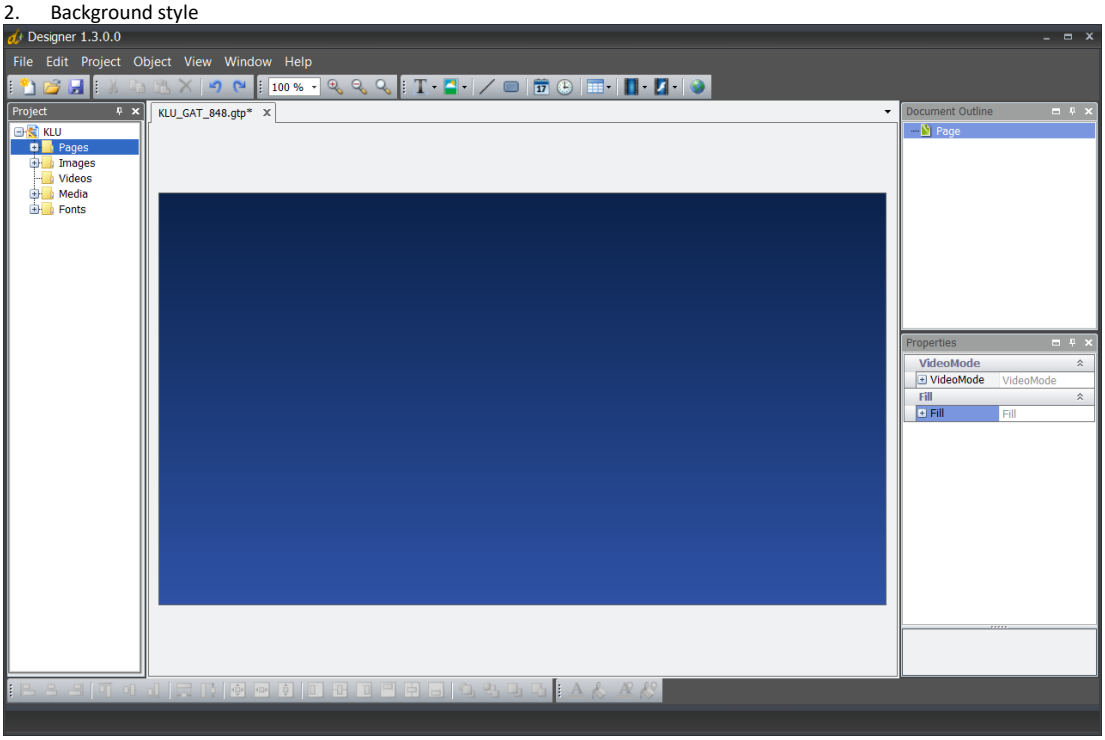
How to create a new page:



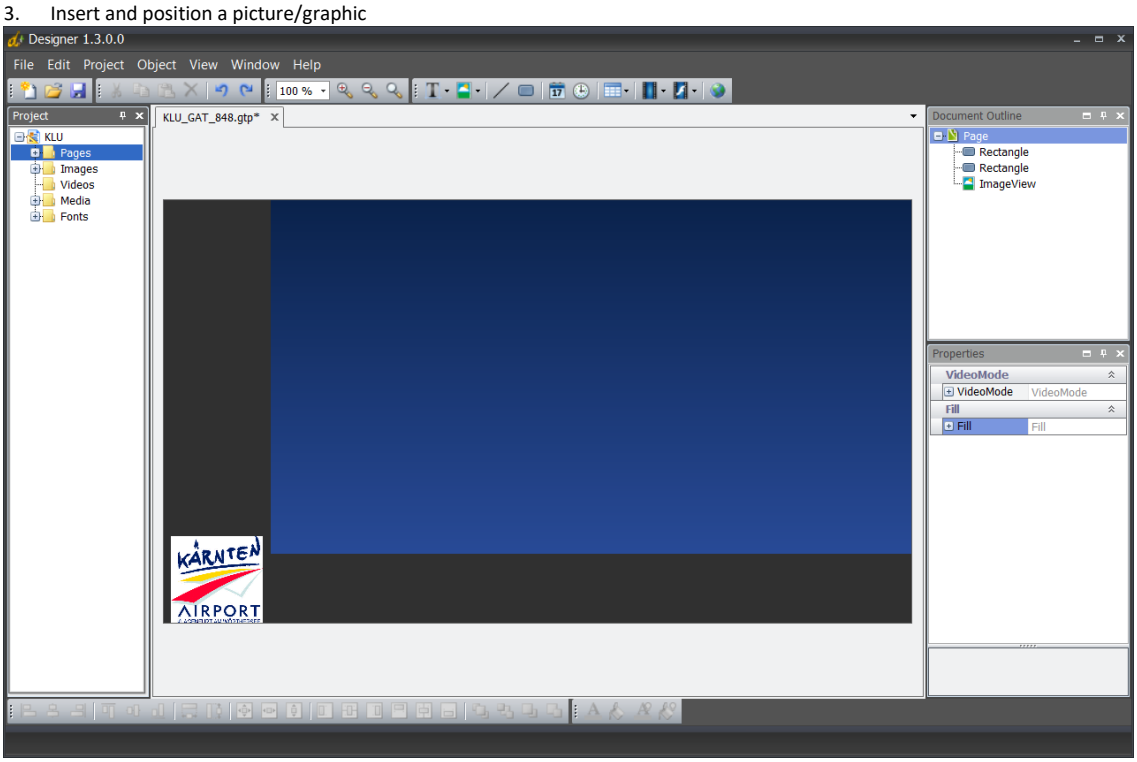
1. Create a new page



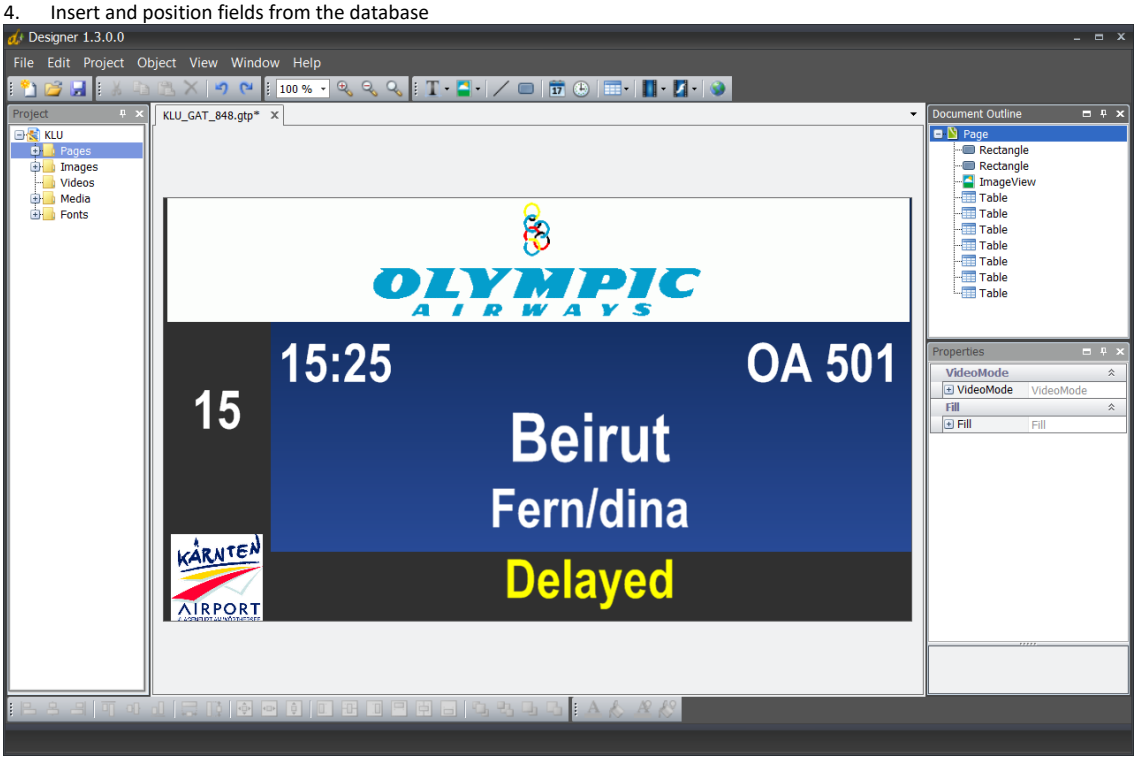
2. Background style



3. Insert and position a picture/graphic



4. Insert and position fields from the database



5. Created page

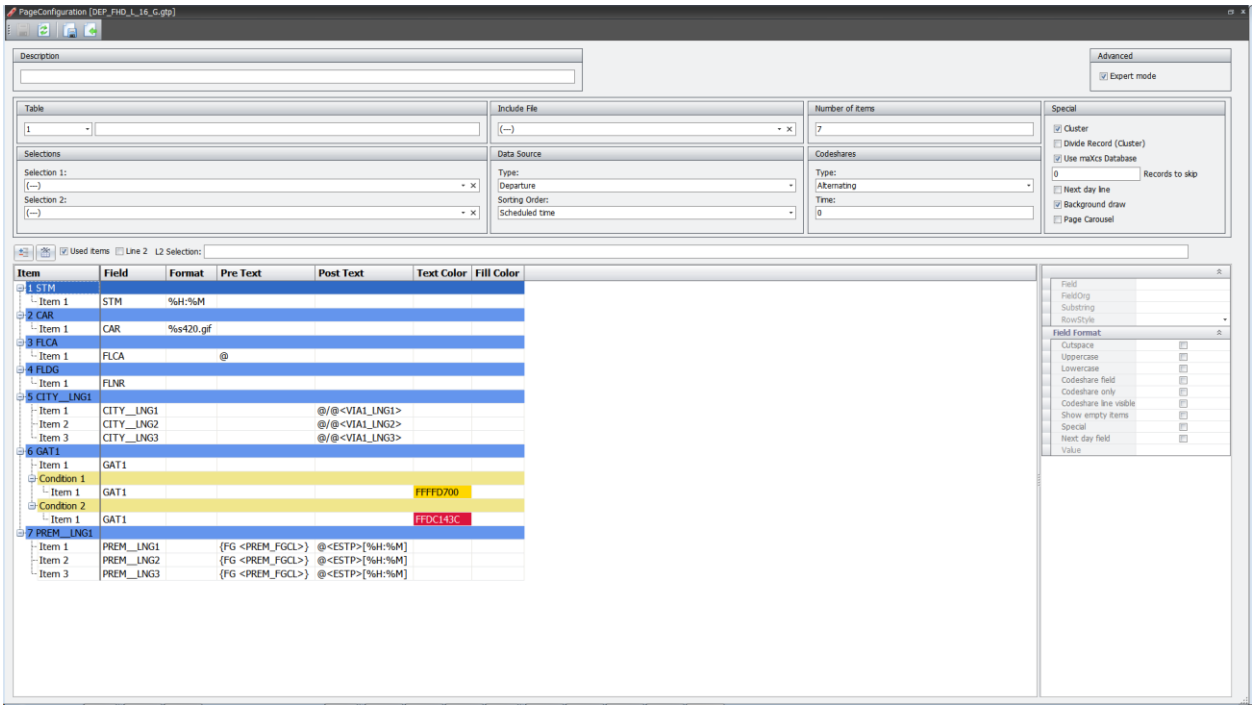

OLYMPIC
AIRWAYS
Gate
15
15:25
OA 501
Beirut
Fern/dina
Delayed
KÄRNTEN
AIRPORT

Page Manager – Page creation and configuration (*part of Designer*)

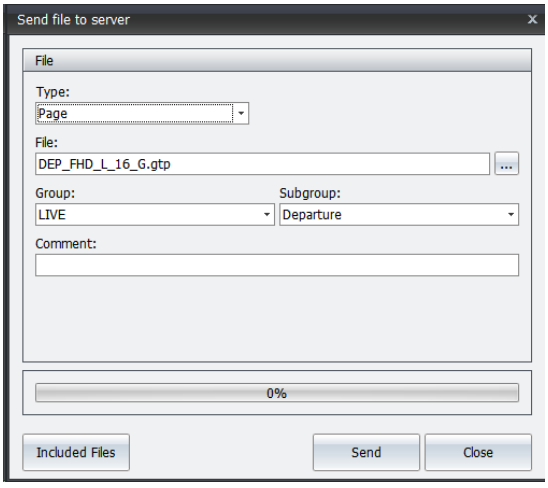
This application allows the easy import of new layouts and templates into **maXcs® System**. The main task is to define at what place (which display device) and at what event or time a certain page or template has to be displayed.

Tasks and Features:

- Connection of the Designer layouts with the System-Database
- Predefined filters for layout pages (= same layout from various resources)
- Special module for handling of Code share flights



Screenshot of typical Page Manager window



Import dialog for new layouts

Final layout (template plus live data)

6.3 Display Manager – Monitoring of Displays and their Content – Handling of "Free Text/Content" (non-flight related data)

Splash screen

Log on screen

The application is divided in several modules. The GUI is designed with docking window technology for each module providing highly flexible design options for the user and also making the application easy to use.

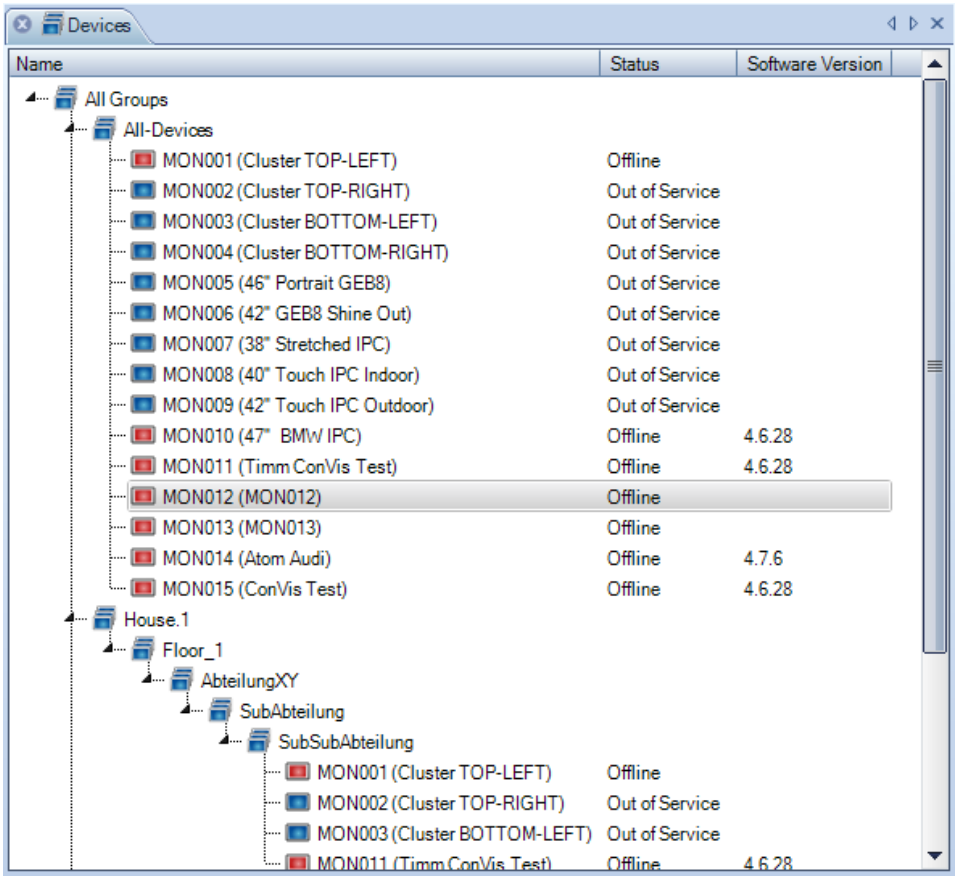
Tasks:

Monitoring of Displays and Content:
For all connected display devices the current status and the valid content can be monitored.

Displays

- Display and display group overview in tree structure
- Graphical symbols for display status info (traffic light)
- Display controls:
  - On/off; reboot; off service
  - Set/change IP address; cluster; layout; location …
- Display group controls:
  - Create; rename; delete display groups
  - Assign displays to a group / remove displays from a group

- Administration of group access rights



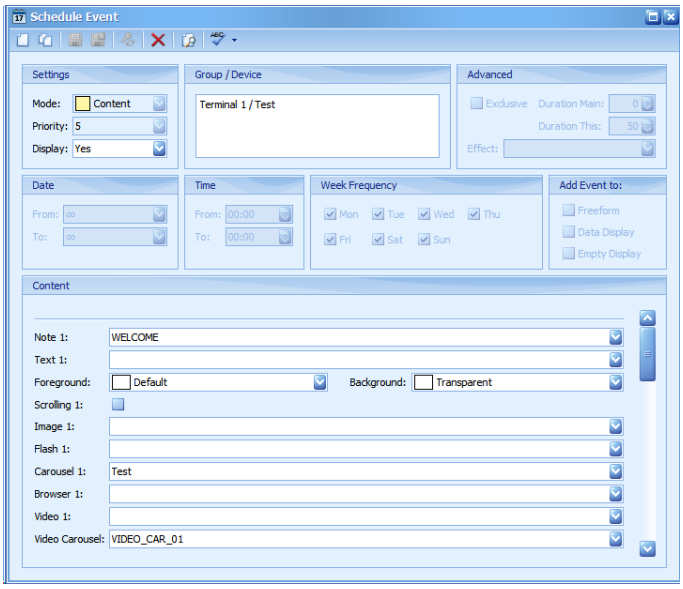
Screen Dumps

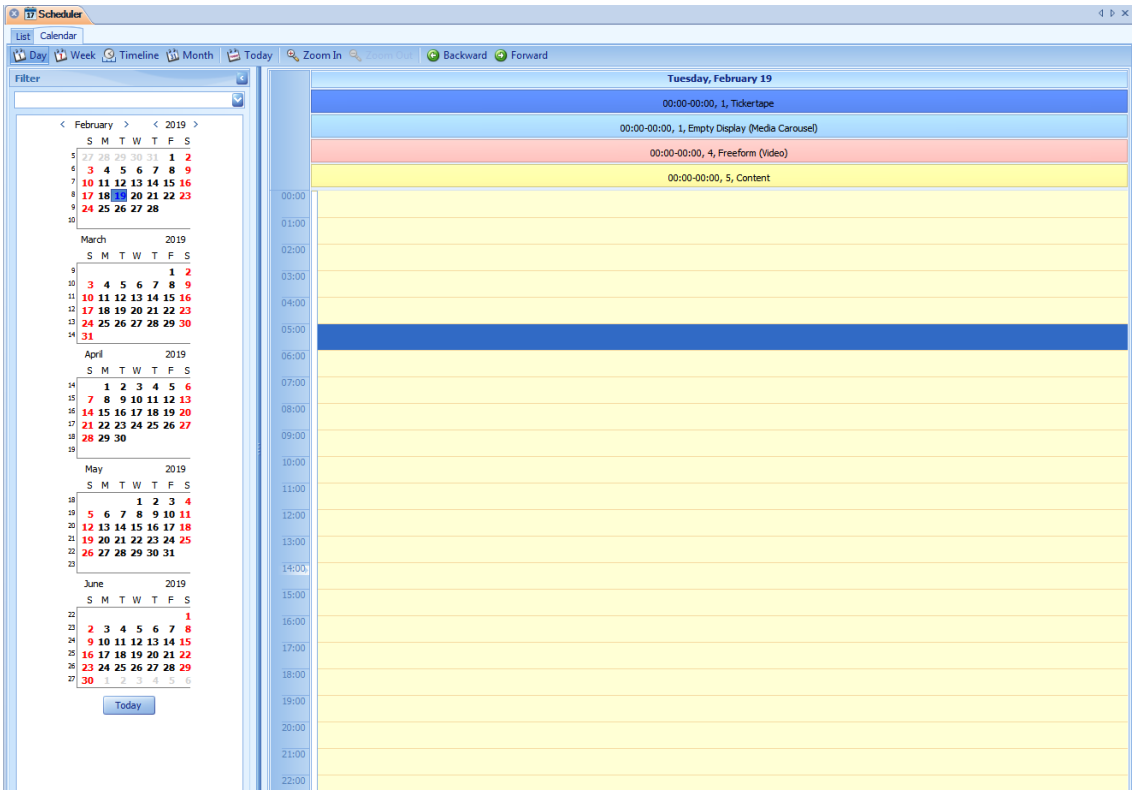
- Read back of current display content
- Automatic read back function for selected displays

Scheduling of content:
With a scheduler individual events are defined for displays and/or display groups. Connected to those events content files can be assigned.

Scheduler:

- Create, edit, delete events
- Preview of scheduled events
- Diary views: Day, Week, Month
- Planning of events for displays and display groups
    - Event activating/deactivating and planning for a certain period
    - Definition of start/end date and time
    - Definition of periodic repletion





Administration of content:
Valid content files can easily be adapted, extended or substituted. Content files are notes, text files, pictures, video files, animation files, etc.

Local Files:

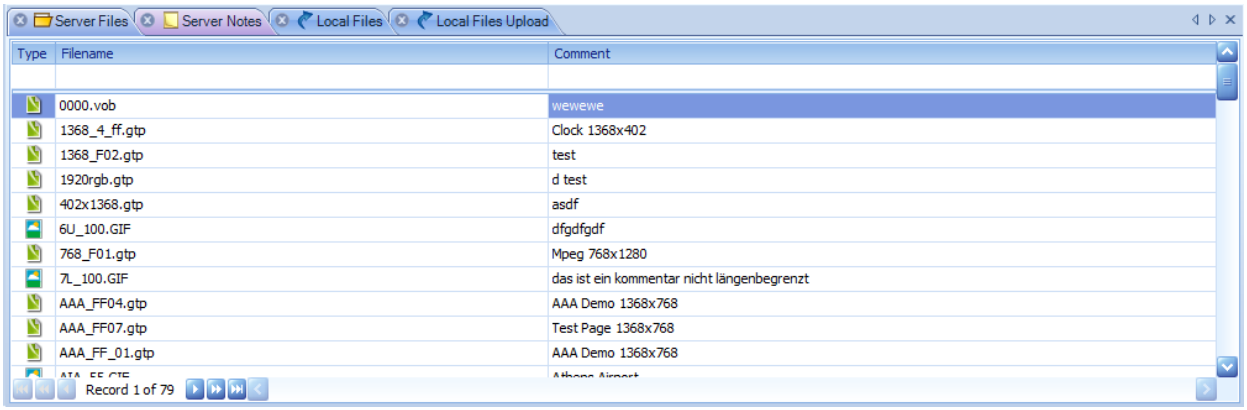
- Transmission of local files to the server
- Set of comments for individual Files

Server Files:

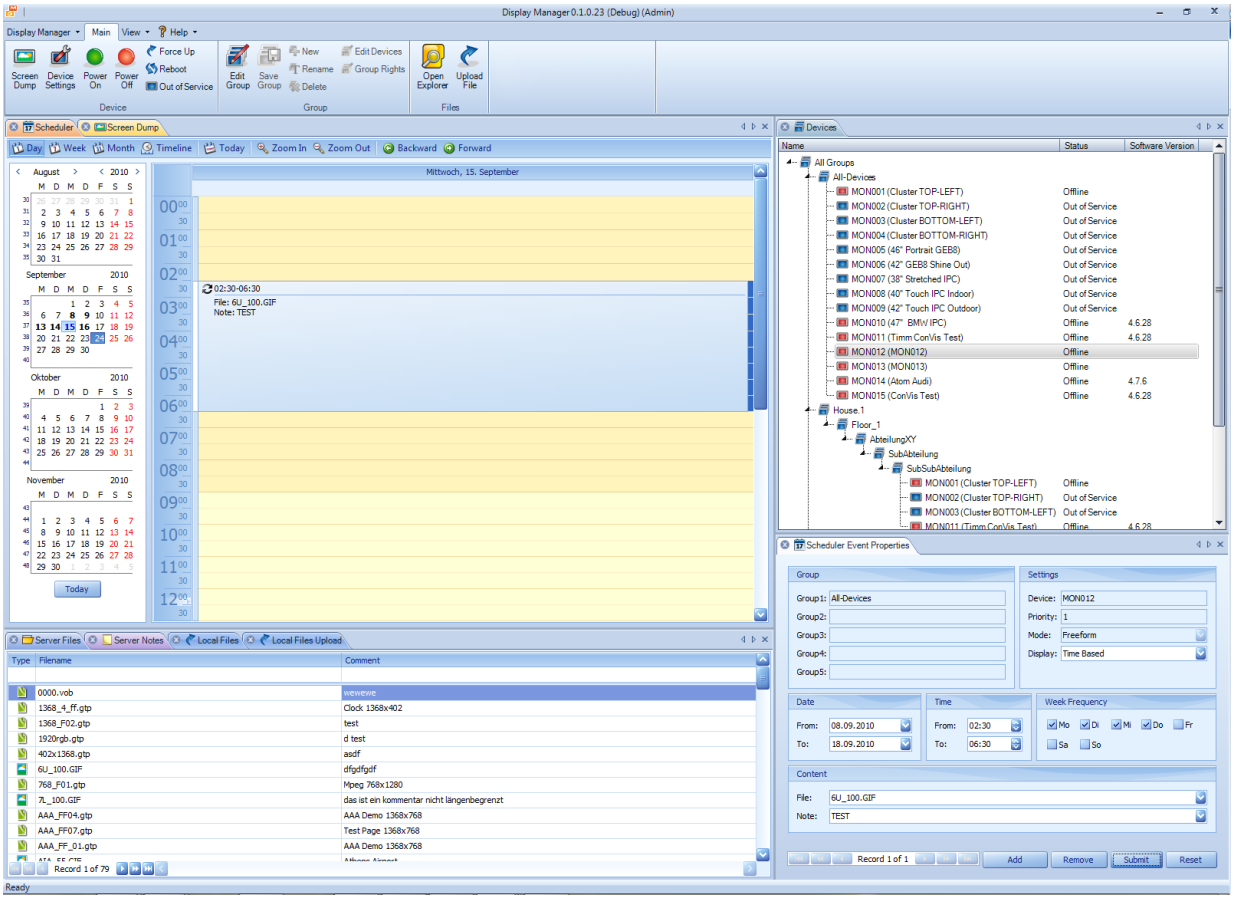
- Structured overview of files stored on the server
- Filtering and sorting functions
- List of displays connected to certain content files
- Direct editing of events connected to content files

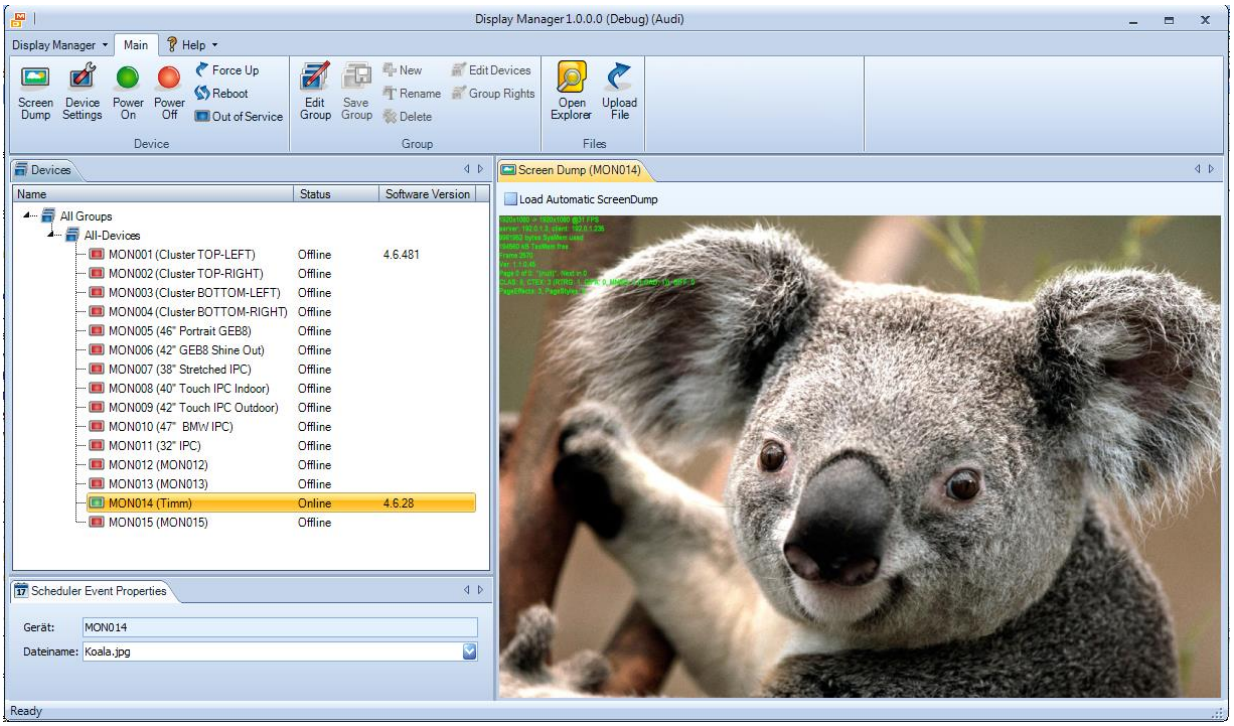
Notes/"Free" text:

- Structured overview of predefined notes
- Create, edit, delete notes
- Direct editing of events connected to specific notes



For an easy handling of the application a ribbon bar menu structure is realised. All main functions for content planning are “drag and drop” supported. Via the security manager tool individual user groups and access right levels can be defined.





7. maXcs® BROWSER BASED TOOLBOX

WEB-TOOLS

Introduction

The web browser-tools support remote access to the system allowing smooth administration and maintenance of the system.

The following web based programs and tools are available for the system administrator:

- Error Logging; Process Info; FIDS Info
- DMU Service with preview feature (DMU WEB)

The following browser based applications and tools are available for the system operator:

- WEB-DAVIS
- WEB-OP interfaces
- Check-In interface
- Gate interface
- Baggage handling interface

7.1 Web-Access System Administrator

Access to the Message/Error - Log Files via WEB

The event or error messages are stored centrally on the server. With this tool an easy access to this data is provided. Error messages and warnings on single devices are retrieved in a very comfortable way.
All system messages available/configured or error messages can be displayed in an overview table. The overview includes for instance device name, type of event, confirmed or unconfirmed messages, or messages over a certain period of time.

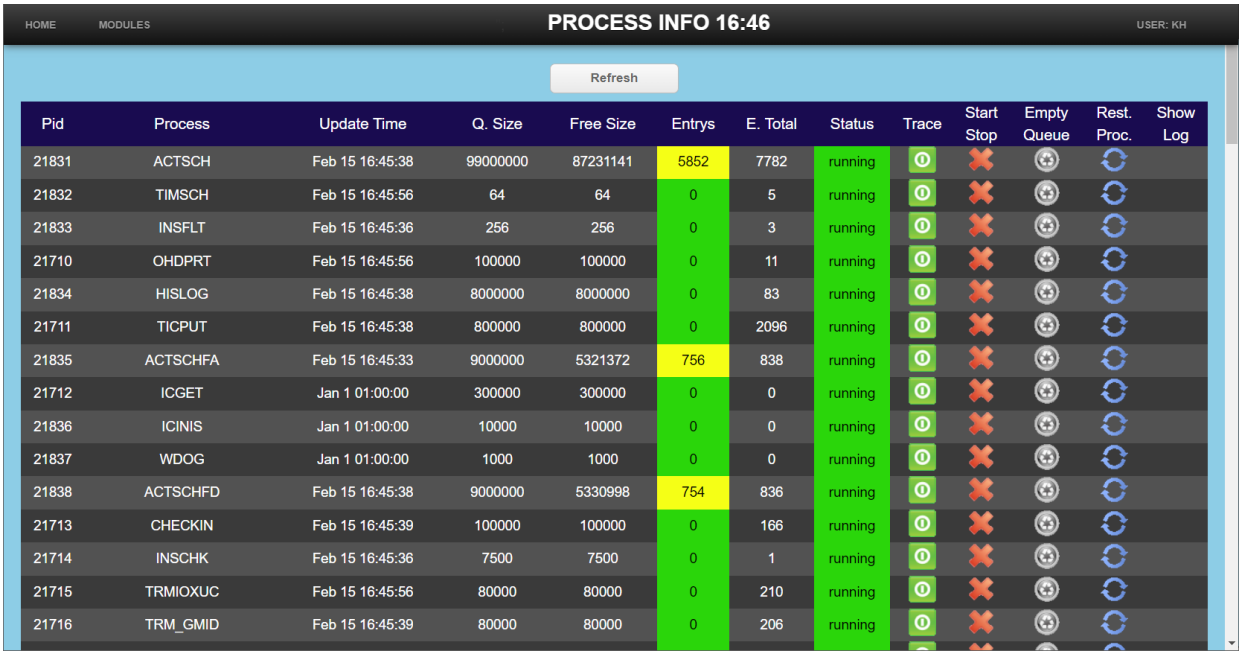
System Process Information access via WEB

The process information tool provides the administrator with an overview of all processes currently running on the server platform. The administrator can stop processes, start new ones and delete the process queue.

Processes Info Window

The screenshot below shows the process info screen. All processes running on the selected server are listed here. The following information is displayed in the screenshot:

- PID (Linux Process ID)
- Process (MAXCS® Process Name)
- Update Time (Time when process carried out last entry)
- Q Size and Free Size (Size of the queue in bytes)
- Entries (Number of entries in the queue)
- E Total (Number of entries in the queue since starting the MAXCS®)
- Status (Process status: running/stopped)
- Trace (Debug reporting mode is switched on or off)
- Start, Stop, Empty, Restart Buttons



Pid	Process	Update Time	Q. Size	Free Size	Entrys	E. Total	Status	Trace	Start Stop	Empty Queue	Rest. Proc.	Show Log
21831	ACTSCH	Feb 15 16:45:38	99000000	87231141	5852	7782	running					
21832	TIMSCH	Feb 15 16:45:56	64	64	0	5	running					
21833	INSFLT	Feb 15 16:45:36	256	256	0	3	running					
21710	OHDPRT	Feb 15 16:45:56	100000	100000	0	11	running					
21834	HISLOG	Feb 15 16:45:38	8000000	8000000	0	83	running					
21711	TICPUT	Feb 15 16:45:38	800000	800000	0	2096	running					
21835	ACTSCHFA	Feb 15 16:45:33	9000000	5321372	756	838	running					
21712	ICGET	Jan 1 01:00:00	300000	300000	0	0	running					
21836	ICINIS	Jan 1 01:00:00	10000	10000	0	0	running					
21837	WDOG	Jan 1 01:00:00	1000	1000	0	0	running					
21838	ACTSCHFD	Feb 15 16:45:38	9000000	5330998	754	836	running					
21713	CHECKIN	Feb 15 16:45:39	100000	100000	0	166	running					
21714	INSCHK	Feb 15 16:45:36	7500	7500	0	1	running					
21715	TRMIOXUC	Feb 15 16:45:56	80000	80000	0	210	running					
21716	TRM_GMID	Feb 15 16:45:39	80000	80000	0	206	running					

Screenshot: Process-Info

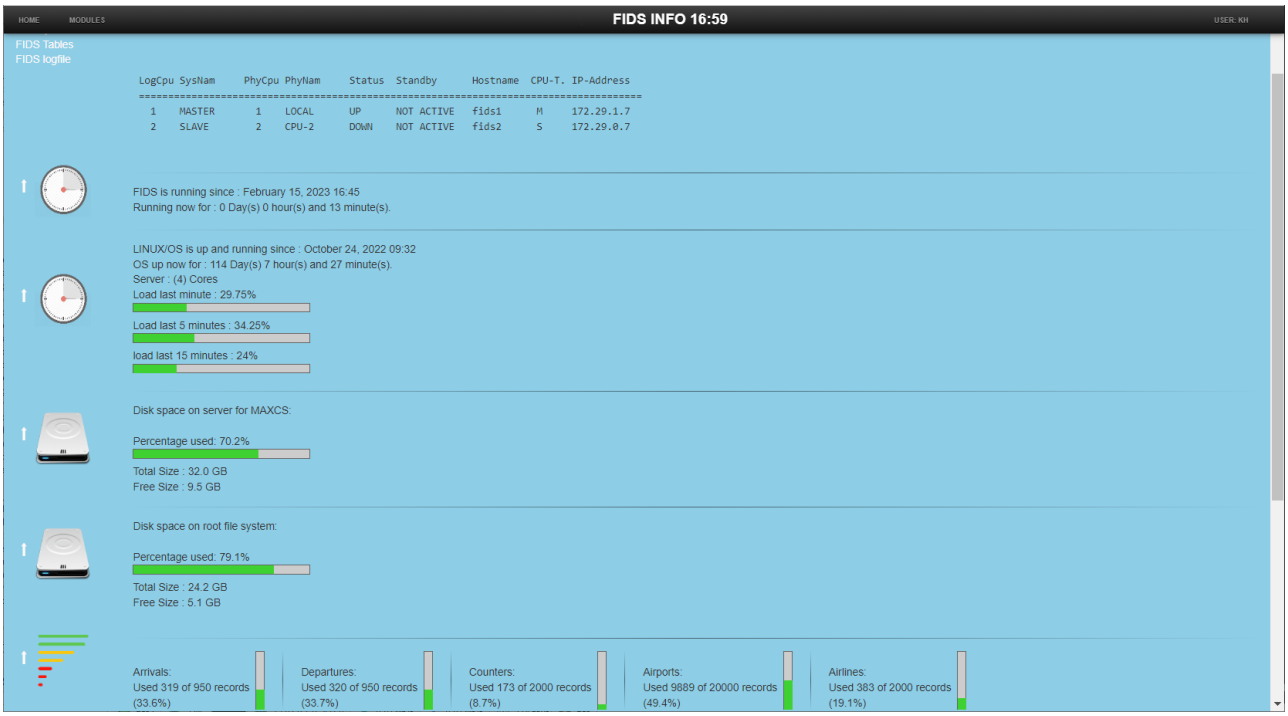
System Status Info via WEB

The status information provides the administrator with a quick overview of the system status.

System Info Window

The System Info Window offers the following information:

- Status of individual servers
- Status of operating system
- Status of flight data stored in the Shared Memory (departure/arrival)
- Different message files of the operating system



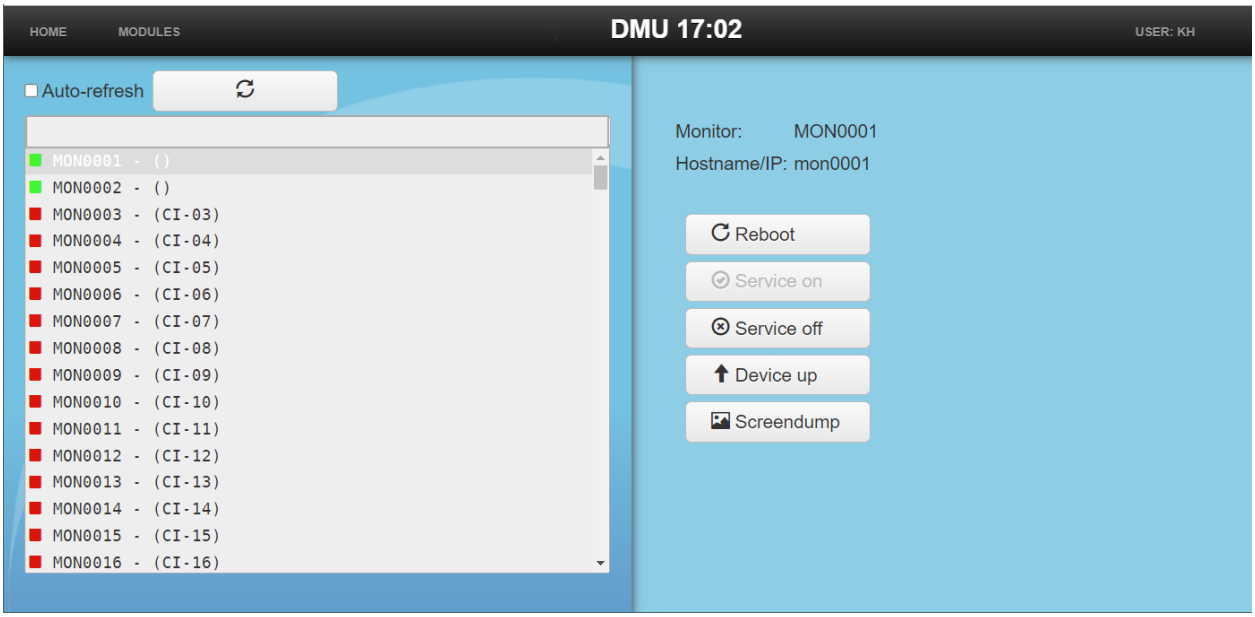
Screenshot: System Status

Device Monitoring Utility (DMU Web Version)

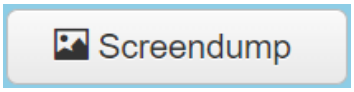
The web version of the Device Monitoring Utility (DMU) allows the system administrator remote access to the displays connected to the system.

The web version of the DMU is a browser based application and can be used with any device connected to the internet (e.g. Laptop, PDA, mobile phone, etc.). Of course, the access is firewall and password protected.

The typical functions are status, reboot, power on/off and screen dump.



Main screen of the DMU with list box of monitors

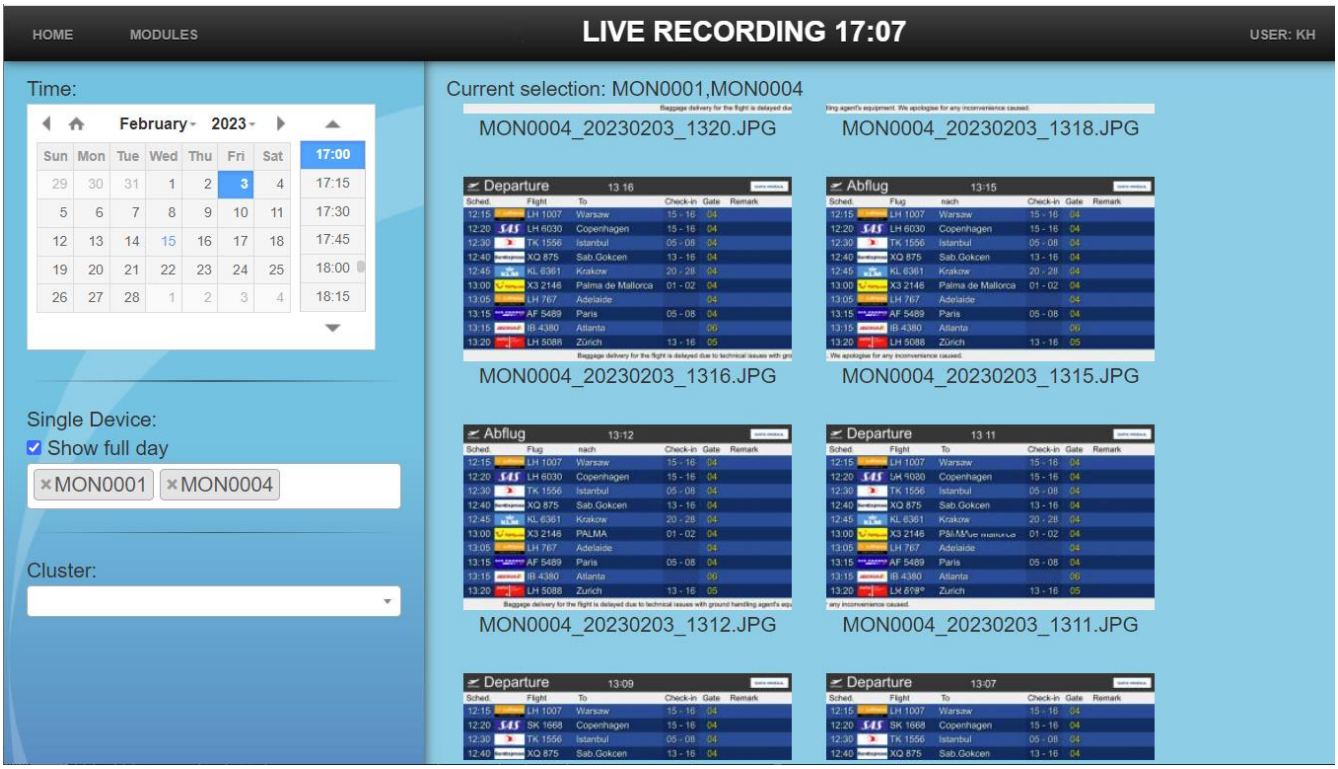


The “Screen Dump” button allows the user to generate screenshots of the current content shown on a dedicated public display.

Display of a screen shot of a selected display

Live Recording

Live Recording allows an overview of collected screen contents of the configured displays.



Screen shows the screenshots of the selected display at the selected date

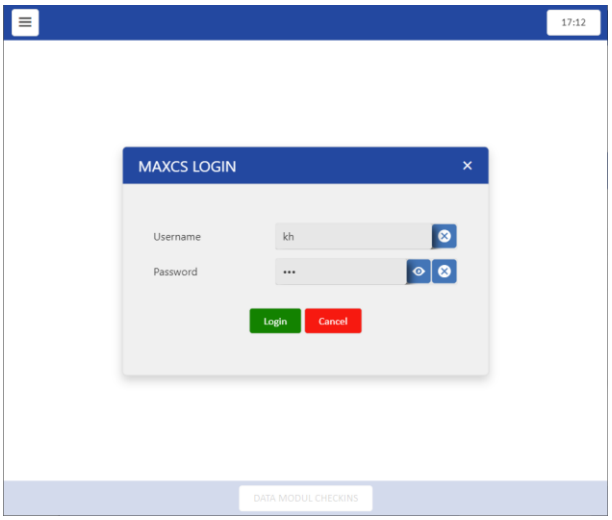
7.2 Web-Access System Operator/User

WEB OP Interfaces

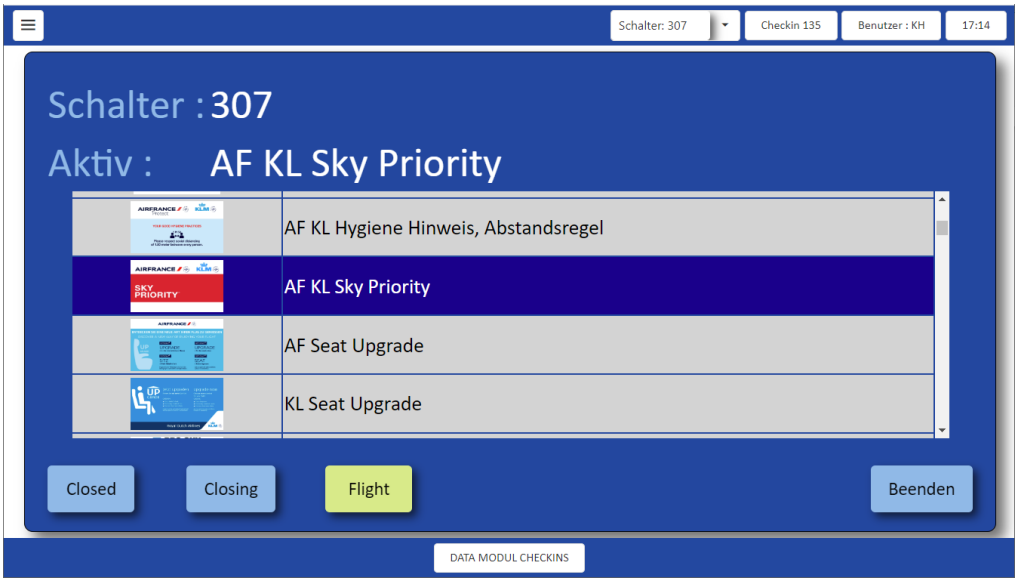
This group of applications is accessible via web browser on any connected terminal within the system network. This includes hardware of any third party or third party system, for instance CUTE-terminals airline/handling agent terminals, etc.

The user with access to the system is in the position (while authorised) to enter or change local data.
For example, the check-in information (Counter Open / Counter close / alternative display content for the counter / etc) at a dedicated check-in counter can be updated.

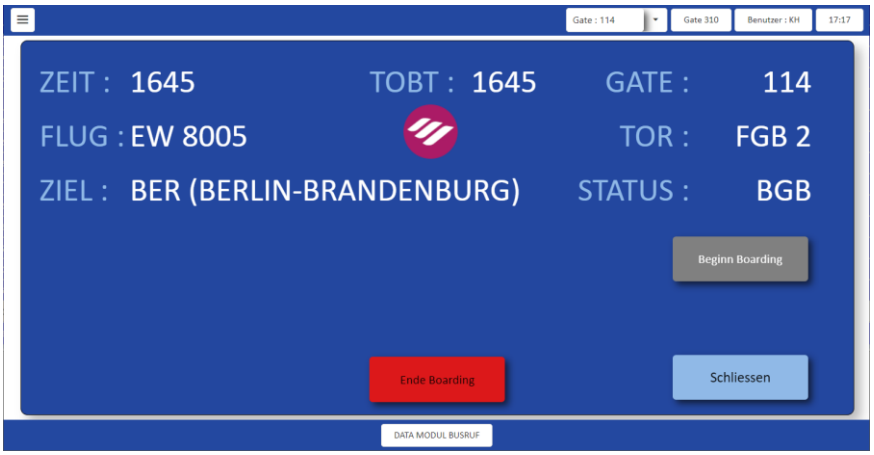
Due to the consequent use of browser based technology, no certification for the browser based OP interface is required for any third party hardware (SITA, AMADEUS etc.). Communication and Updates inside the browsers are done in real-time effect with modern technology's like AJAX or Web sockets. There is not old push technology used for this applications.



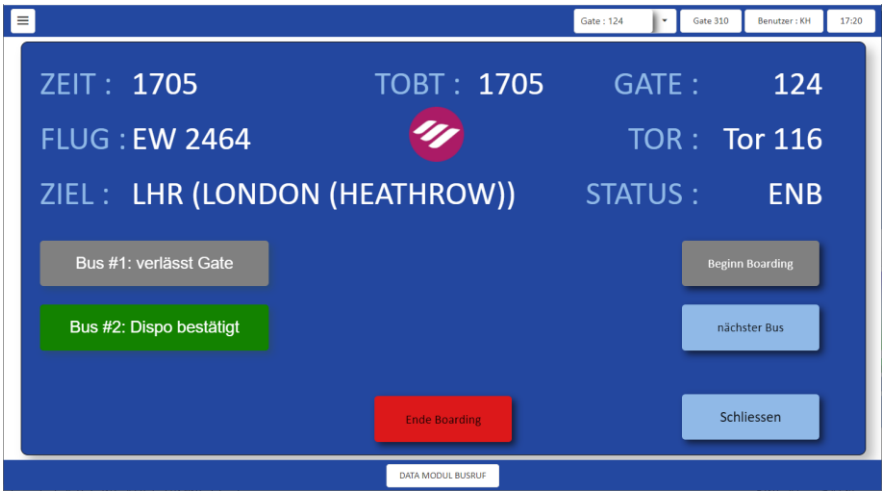
Login Mask for modern Web OP interfaces



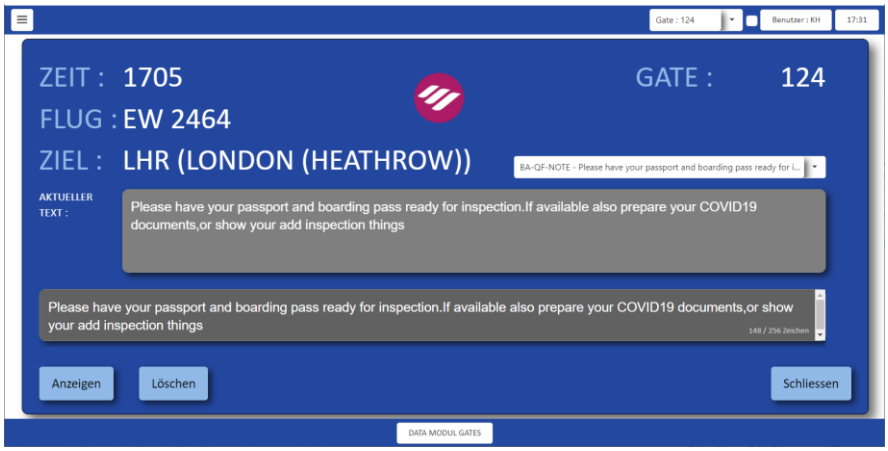
Update the flight information dedicated to its counter.



Boarding mask for Gate operators



Bus request and boarding mask for operation on bus gates.



Gat mask for operation on additional text/videos/images on gates.

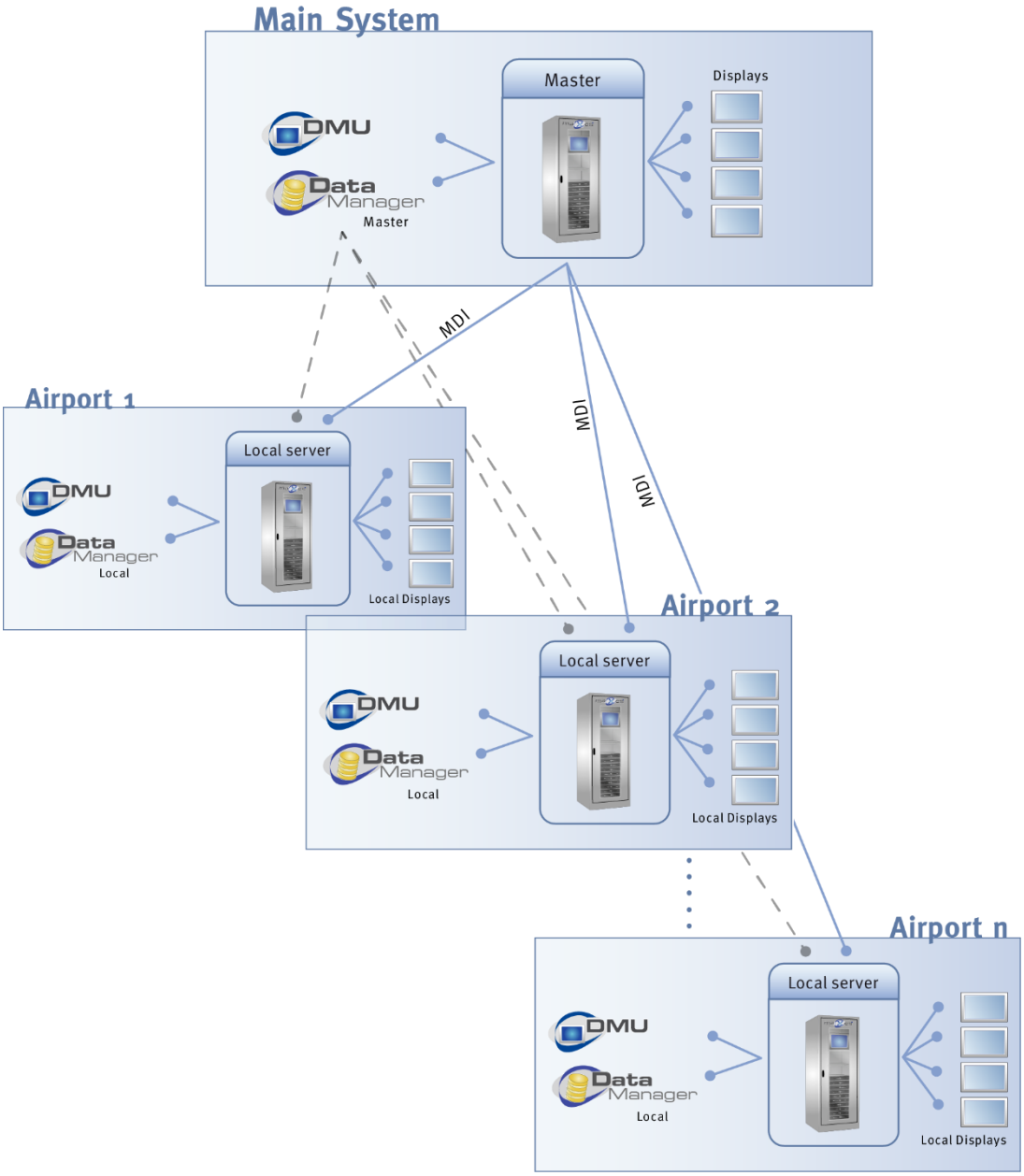
8. maXcs® INTERFACES

8.1 System Interfaces

The open architecture of MAXCS allows the interfacing of the system to the majority of data processing system available. The following interfaces have already been realised:

- FDI (**maXcs®** Data Interface)
- Postgre SQL Database
- Various other Databases via ODBC-driver
- UFIS-AODB Interface
- Inform-AODB Interface
- GHS Top System
- ISO (SKY-Base) AODB Interface
- METAR-Interface (Meteorological Aviation Routine Weather Report)
- XML-Export Interface
- Various Teletext / Videotext Export interfaces
- Master Clock (NTP-Daemon or via RS232-Connection and Terminal Server)
- Various PA (Public Announcement) Systems
- Baggage Handling Systems
- XML-Import Interface
- JSON Import Interface

8.2 MDI (maXcs® Data Interface)



Multi Airport Configuration:

In a multi airport environment displays are located in several locations (“Airport 1” – “Airport n”).
The displays in location 1 (“Airport 1”) are controlled by a local server also located in “Airport 1”.
The displays located in “Airport n” are controlled by a local server located in “Airport n”.

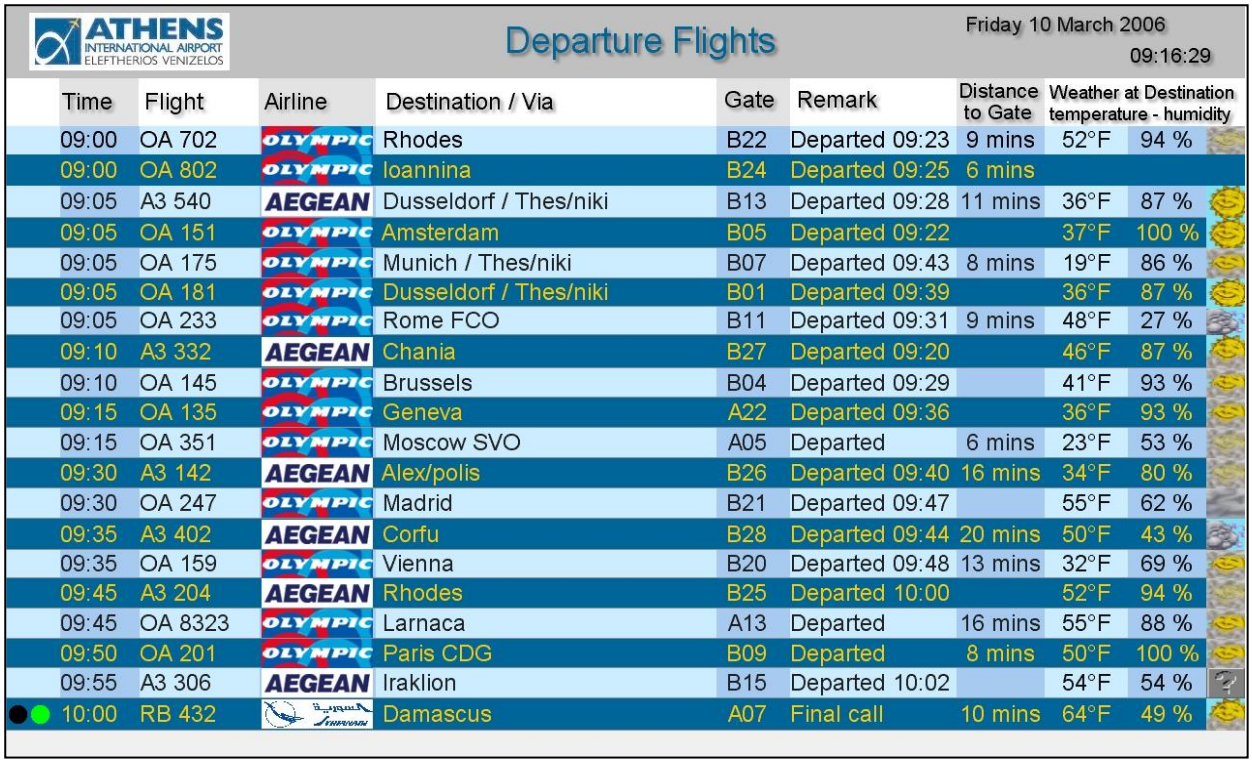
All local servers obtain their data from a central master server which distributes all relevant flight information from its database to the local servers. The flight information could be the flights for the next several days. The flight information is entered and changed from a Data Manager workstation connected to the master server.
With DMU, the administrator can login to each local server and check the status of the displays at the remote location from a workstation in the master server network.

In case of a network failure or other communication error the workstation installed in the subnet of the local servers can be activated and used to change the local flight information for this location only.
A locallay installed DMU gives the user only access to the local displays.

8.3 METAR – Interface (Weather forecast system)

The METAR-Weather Interface allows the airport to display weather information for the different destinations providing an additional service for the passengers.
The information is updated hourly from the NWS (National Weather Service) FTP-Server.

Check in Screen Layouts (English/Russian) with actual weather information



Time	Flight	Airline	Destination / Via	Gate	Remark	Distance to Gate	Weather at Destination temperature	humidity
09:00	OA 702	OLYMPIC	Rhodes	B22	Departed 09:23	9 mins	52°F	94 %
09:00	OA 802	OLYMPIC	Ioannina	B24	Departed 09:25	6 mins		
09:05	A3 540	AEGEAN	Dusseldorf / Thes/niki	B13	Departed 09:28	11 mins	36°F	87 %
09:05	OA 151	OLYMPIC	Amsterdam	B05	Departed 09:22		37°F	100 %
09:05	OA 175	OLYMPIC	Munich / Thes/niki	B07	Departed 09:43	8 mins	19°F	86 %
09:05	OA 181	OLYMPIC	Dusseldorf / Thes/niki	B01	Departed 09:39		36°F	87 %
09:05	OA 233	OLYMPIC	Rome FCO	B11	Departed 09:31	9 mins	48°F	27 %
09:10	A3 332	AEGEAN	Chania	B27	Departed 09:20		46°F	87 %
09:10	OA 145	OLYMPIC	Brussels	B04	Departed 09:29		41°F	93 %
09:15	OA 135	OLYMPIC	Geneva	A22	Departed 09:36		36°F	93 %
09:15	OA 351	OLYMPIC	Moscow SVO	A05	Departed	6 mins	23°F	53 %
09:30	A3 142	AEGEAN	Alex/polis	B26	Departed 09:40	16 mins	34°F	80 %
09:30	OA 247	OLYMPIC	Madrid	B21	Departed 09:47		55°F	62 %
09:35	A3 402	AEGEAN	Corfu	B28	Departed 09:44	20 mins	50°F	43 %
09:35	OA 159	OLYMPIC	Vienna	B20	Departed 09:48	13 mins	32°F	69 %
09:45	A3 204	AEGEAN	Rhodes	B25	Departed 10:00		52°F	94 %
09:45	OA 8323	OLYMPIC	Larnaca	A13	Departed	16 mins	55°F	88 %
09:50	OA 201	OLYMPIC	Paris CDG	B09	Departed	8 mins	50°F	100 %
09:55	A3 306	AEGEAN	Iraklion	B15	Departed 10:02		54°F	54 %
10:00	RB 432	Syrianair	Damascus	A07	Final call	10 mins	64°F	49 %

Departure Screen Layouts (English) with actual weather information

9. maXcs® SPECIAL MODULES

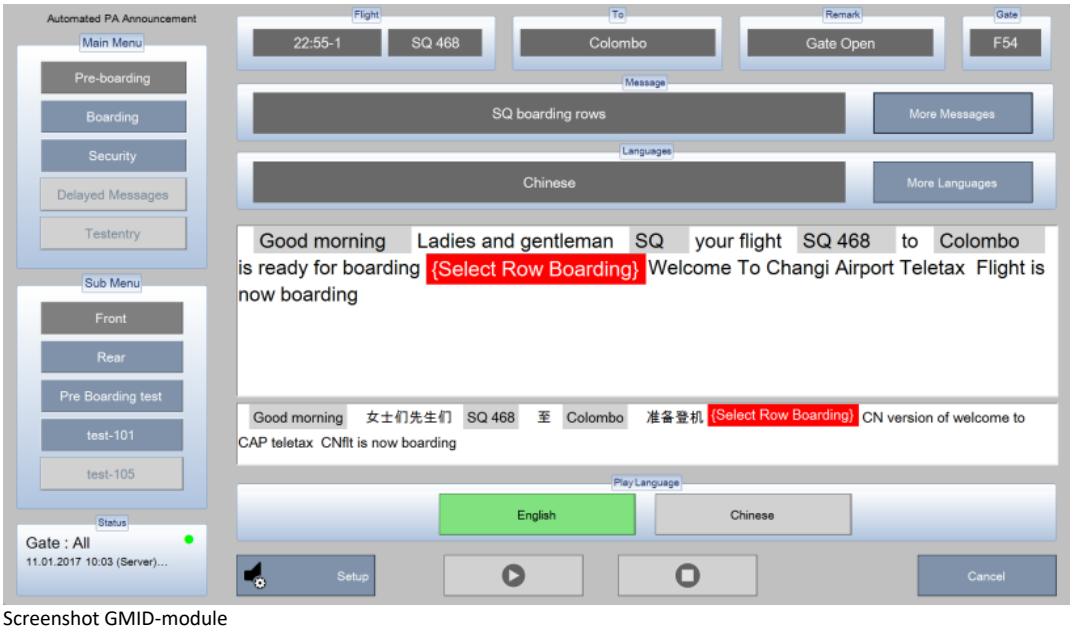
9.1 BMID

The BMID-module (Baggage Message Input Device) allows operators to adjust the baggage status per flight via touchscreen (first bag/last bag).

Screenshot BMID-module

9.2 GMID

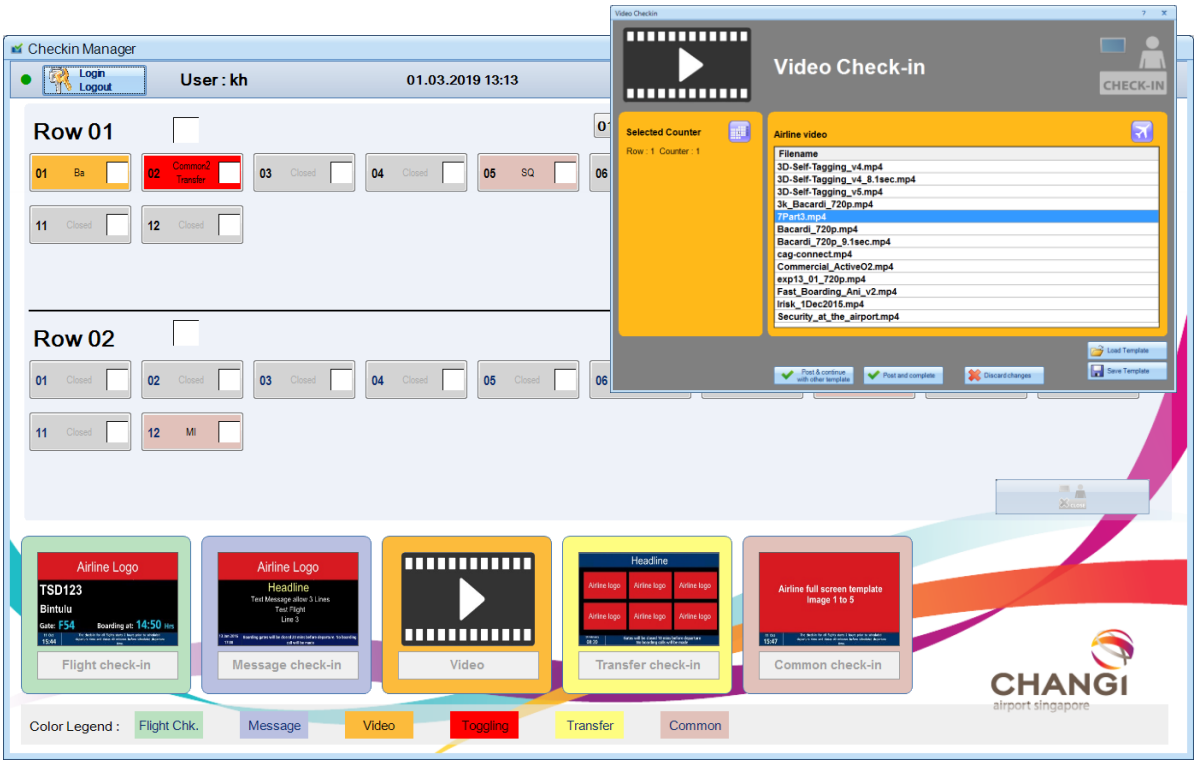
The GMID-module (Gate Message Input Device) allows operators to adjust the boarding status for dedicated flights via touchscreen. In addition predefined voice announcements in different languages can be activated by using this module.



Screenshot GMID-module

9.3 CATS

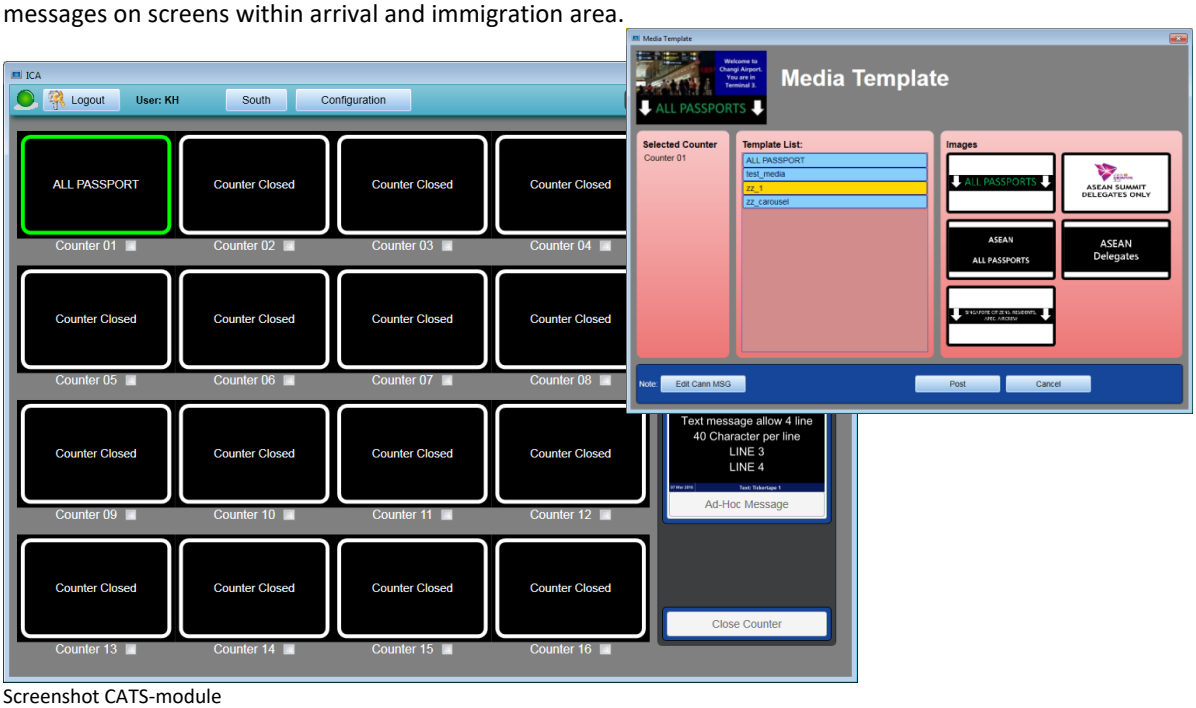
The CATS-module allows operators to assign different kinds of content (e. g. videos, pictures, text) to certain check-in counters.



Screenshot CATS-module

9.4 ICA

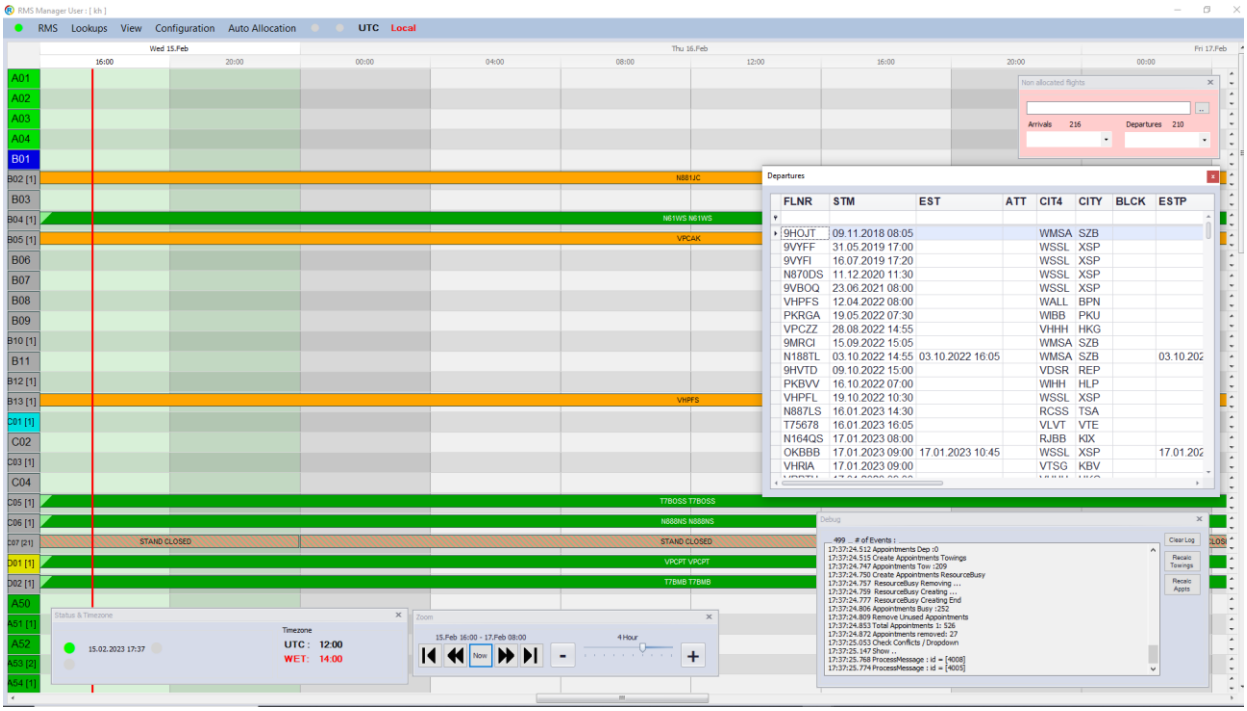
The ICA-module (Immigration and Checkpoints Authority) allows the operator to show predefined or individual messages on screens within arrival and immigration area.



Screenshot CATS-module

9.5 RMS

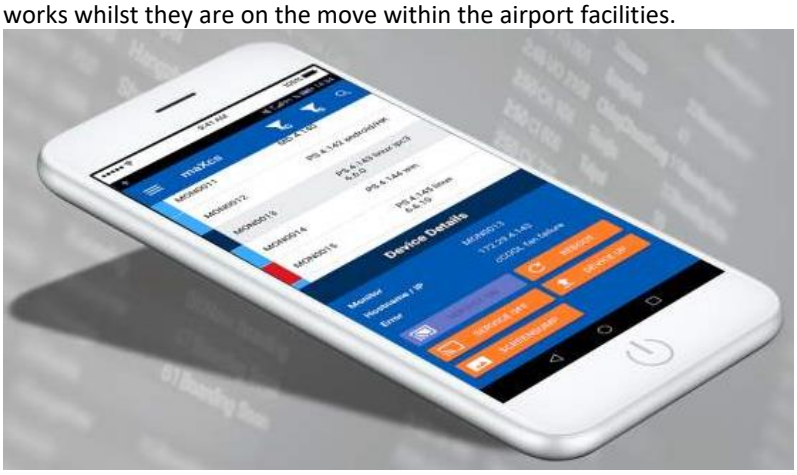
The RMS-module (Resource Management System) allows operators to get an overview about the current position of aircrafts at the airport as well as resource allocation.



Screenshot RMS-module

9.6 Apps

Native apps, e. g. for DMU-module, allow airport staff to check on screens or to carry out preventive maintenance works whilst they are on the move within the airport facilities.



Screenshot DMU-app

DATA MODUL

Developed / Designed / Made in Germany

Specification subject to change without prior notice.

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