



**IMiS®/mDMS
Manual**

Version 1.6.1702

**IMAGING
SYSTEMS**
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1 INTRODUCTION

This manual describes the usage of IMiS®/mDMS web service and client mobile application. It provides a user with useful technical and content-related information.

1.1 Purpose of the guide

The manual describes administrator tasks required for the management of the IMiS®/mDMS application. It is intended for:

- installation and deployment of the IMiS®/mDMS Client application on the iOS and Android mobile devices.
- management of IMiS®/mDMS Service administration interface.
- configuration of the IMiS®/mDMS Client application for running on mobile devices.
- administration of the users, user environment and document types.
- error identification and troubleshooting.

1.2 Target audience

The manual is intended for application developers and system administrators with knowledge of the IBM Domino/Notes platform.

1.3 Scope and requirements

The manual describes administrative tasks and IMiS®/mDMS application settings in order for any IBM Notes application to work on mobile devices.

For additional information contact the IMiS® technical support at the email address:

support@imis.eu.

1.4 Conventions

The manual uses various styles and colours to highlight important information.

These are explained in the table below:

Style	Purpose
Regular	Basic information. Description of functionalities.
<u>Underlined text</u>	Topics in the chapter.
»Quotation«	Names of sections, headers, tabs and warnings.
[Red text]	Names of actions with selected settings. Options selectable from the dropdown menu. Values of Notes document fields
[Blue text]	Names of Notes document fields.
[Green text]	Section and contained section names.
[Navadno vijolično]	Header names.

1.5 Abbreviations

The table below shows the abbreviations used in the text and images of this guide:

Abbreviation	Meaning
IBM Notes application	An application written in LotusScript.
IBM Domino	A server platform for running IBM Notes applications.
Apple Store	A web application center for Apple products.
Google Play	A web application center for Google products.
CRM application	A test and demonstrative application developed in LotusScript for customer management support.
IMiS®/mDMS Service	A web service for forwarding IMiS®/mDMS application settings and IBM Notes application data to a mobile device.
IMiS®/mDMS Client	A mobile application for display and running of IBM Notes application on a mobile device.
IMiS®/mDMS Service Provider	An application used by IMiS®/mDMS Service for obtaining and running customized actions in an IBM Notes application.

2 PRESENTATION

2.1 General

The architecture and concept of the IMiS®/mDMS environment enables the IBM Notes application developers and mobile device users to transfer applications to their mobile devices in a fast and simple manner. No unnecessary intervening in the source applications, technical knowledge or special experience in application development for mobile devices is required.

The concept is based on the »application abstraction« approach, which enables the use and display of seemingly different applications in the same way, regardless of the mobile device and always through the user's native mobile device application.

The complex business logic that a source application may contain can be run directly from a mobile device. This way, the application retains a consistent performance and rules that apply. The scope of flexible application settings enables users to easily customize each application.

2.2 Characteristics

IMiS®/mDMS Service is a web service that specifies how to use an application and how it displays on mobile devices. Each service can join a number of different applications that can be distributed in the Domino domain through a mutual virtual application portal.

The main characteristics of IMiS®/mDMS are:

- Access of your enterprise documents and content anywhere from any mobile device.
- Use of any IBM Notes application on mobile devices without any modification.
- Adjustment of application appearance and functionality without any intervention in the IBM Notes application code or prior knowledge of the mobile platform specifics.
- Application appearance remains the same regardless of the mobile device.
- Consolidate all your Notes applications to run on mobile devices.
- Any Notes application can be displayed and used through native mobile device application.
- Secure your mobile access to enterprise data by using the latest encryption technologies and major EMM environments.
- Complex business logic of Notes applications can be easily used directly from mobile devices.
- Notification service let mobile user know about crucial workflow events.

- Workflows, embedded views and agents from Notes applications are easily handled and displayed on your mobile devices.
- Search for content and documents by metadata and content's full-text.
- Document data display in open or closed sections in portrait or landscape mode of a mobile device.

3 ARCHITECTURE

3.1 General

IMiS®/mDMS is a 3-tier system in the client-server model of architecture (https://en.wikipedia.org/wiki/Multitier_architecture#Three-tier_architecture) with the following tiers:

Presentation tier

It is represented by the IMiS®/mDMS Client application for mobile platforms iOS in Android. It is a native application of a mobile platform where the client is installed. It connects to the IMiS®/mDMS Service, which represents the Logical tier. It fully prescribes the manner of forwarded data presentation to the presentation tier via the configuration profiles.

IMiS®/mDMS Client is a thin or a light client (https://en.wikipedia.org/wiki/Thin_client), which is capable of dynamic rendering of data based on the IMiS®/mDMS Service configuration.

When logging in, the IMiS®/mDMS Service transfers display settings and application operation to the IMiS®/mDMS Client application. The latter does not contain or specify the manner of data presentation when installed or locally at a later time. Therefore, the same client version can display various applications of various users in a completely different manner.

It uses Hyper Text protocol to communicate with the Service layer (HTTP - https://en.wikipedia.org/wiki/Hypertext_Transfer_Protocol), which can be optionally encrypted using latest encryption standards (PKI/TLS). Communication specifics are set by the IMiS®/mDMS Service.

User can also choose to use 3rd party MDM solutions such as MobileIron Inc. (<https://www.mobileiron.com>) or Citrix Systems, Inc. (<https://www.citrix.com/products/xenmobile>), which via their platforms enable management of connected devices and parameters of the IMiS®/mDMS Client.

Logical tier

It is represented by the IBM Notes application IMiS®/mDMS Service through its SOAP Service.

Service application contains:

- Configuration parameters of all NSF databases, which are exposed through IMiS®/mDMS platform.
- Administration interface for setting system related parameters.
- Operational monitoring.

IBM Notes application settings are controlled by an administrator through an intuitive and easy-to-use interface without having expert knowledge on mobile platforms and/or IBM Notes application development.

IMiS®/mDMS Service can access IBM Notes applications (Data tier) locally or remotely and spread the application execution load on multiple IBM Domino nodes.

Through IMiS®/mDMS Provider extensions it enables IMiS®/mDMS Client to execute application specific actions. They are implemented in surfaced applications backend business logic, which is crucial for correct and efficient action execution. This approach was taken due to the fact that the IMiS®/mDMS Service application business logic is totally abstract and doesn't allow user customization to drive custom actions.

IMiS®/mDMS Service is working with other IMiS® products (IMiS®/ARChive Server, IMiS®/Storage Connector), which extend IBM Notes applications and add flexible and high performance archiving solution to any IBM Notes application.

Data tier

It is represented by the existing IBM Notes applications with documents and content data. Applications can be hosted locally on server or on other IBM Domino servers to which the web server has access to. IMiS®/mDMS Service uses NRPC protocol to access databases and honors all security options configured by an administrator, which are in place for other IBM Notes users. The Service can access the metadata of the documents or enclosed digital contents.

The database tier can optionally be represented by the IMiS®/ARChive Server as a repository of digital and digitalized content.

For more information see <http://www.imis.eu/en/products/imisarchive-server>.

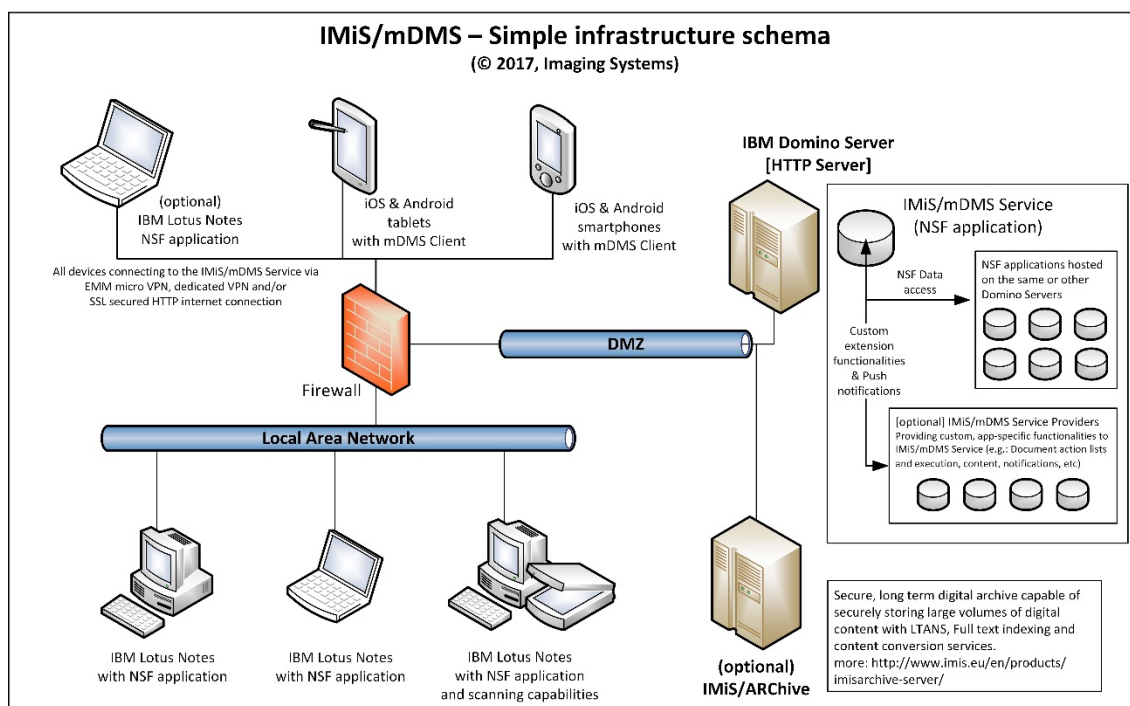


Image 1: The scheme of the IMiS®/mDMS infrastructure

4 SETTING UP APPLICATION OPERATION

This chapter defines IBM Domino server administrator and mobile user tasks in order to set up an IBM Notes application on a mobile device. Later on, an example of how to use a simple CRM application on a mobile device is presented.

4.1 Setting up operation on IBM Domino Server

For operation setup of any of the IBM Notes applications on a mobile device, the administrator has to take the following steps at the Domino server:

1. Create an administration interface of IMiS®/mDMS Service.
For more information see [see chapter 5.2 Administration interface generation](#).
2. Form a set of documents. If the index is not available it needs to be prepared.
If necessary, implement custom logic for document listing.
For more information see [chapter 6.2 »Datasets«](#).

3. Determine what data will be displayed on the mobile device. The data needs to be sorted in sections so that the data quantity is controllable and the section is preferably used as a part of different types of documents. Create document types and specify their assigned sections.

For more information see [chapter 6.3 »Datasources«](#) and [chapter 6.4 »Sections«](#).

4. Create two sections for attachments and IMiS® objects viewing. Set them to document types for which you want this functionality available.

For more information see [chapter 6.4 »Sections«](#).

5. Create actions, place them in sections and place the sections to document types or data sets. Ensure action implementation.

For more information see [chapter 6.4 »Sections«](#) and [chapter 6.5 »Actions«](#).

6. Determine the appearance of the mobile application.

For more information see [chapter 6.1 »Device profiles«](#).

4.2 Setting up operation on iOS mobile device

For an IBM Notes application operation setup on a iOS mobile device, the user takes the following steps at the mobile device:

1. Install the IMiS®/mDMS Client application from Apple AppStore:

<https://itunes.apple.com/us/app/imis-mDMS/id1017326823?mt=8>

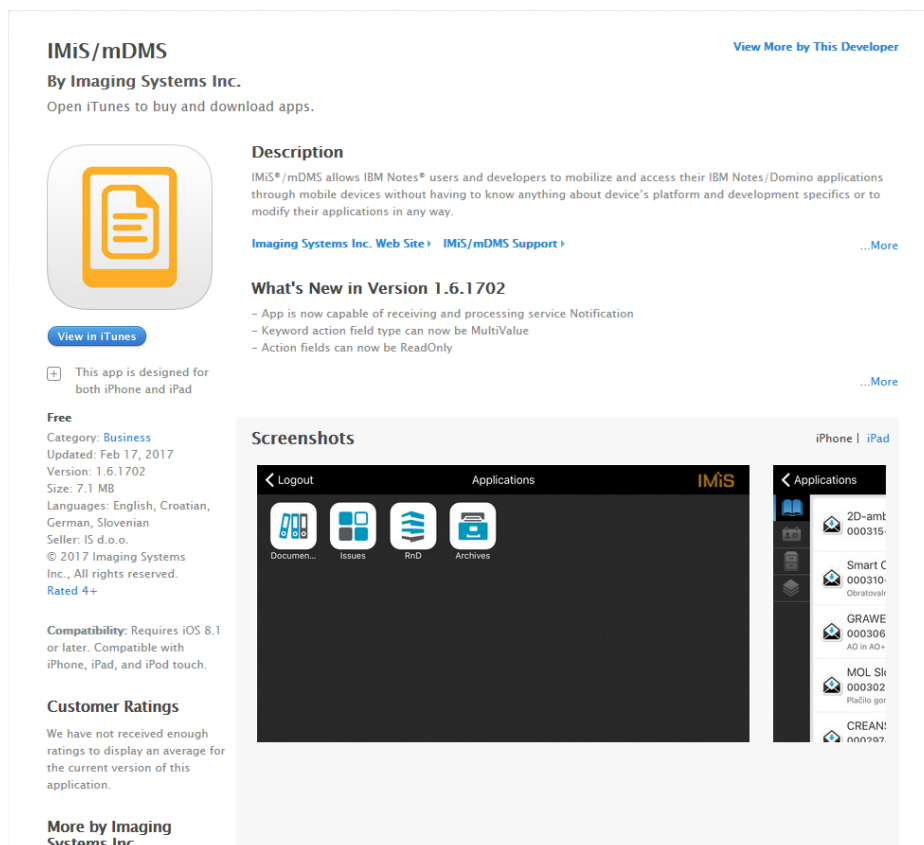


Image 2: The presentation page of the IMiS®/mDMS Client application on Apple Store

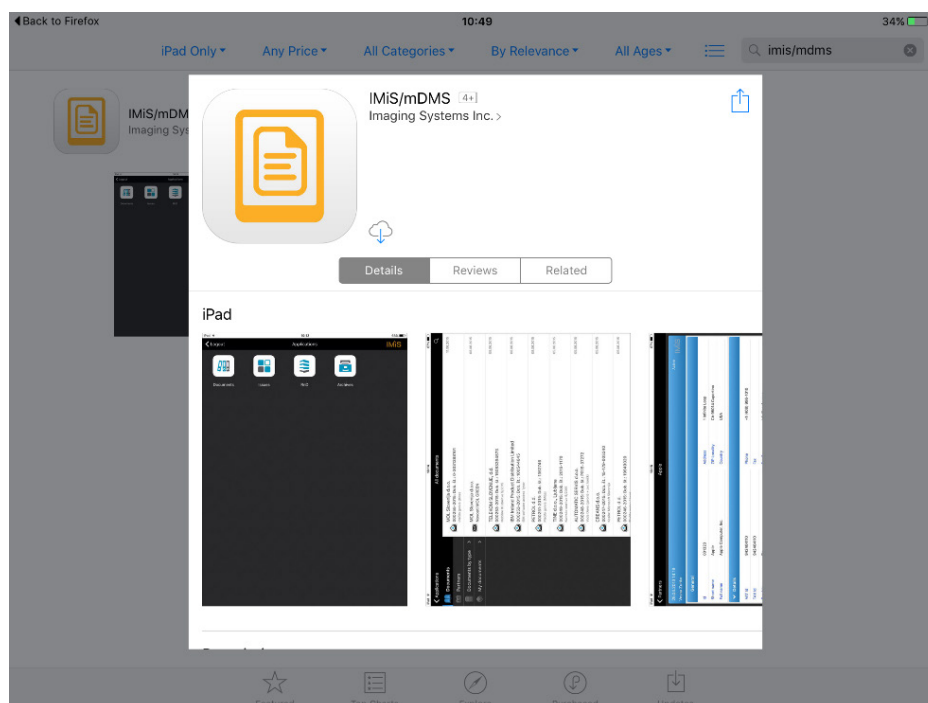


Image 3: Installation of the IMiS®/mDMS Client application from Apple Store on a mobile device

2. After a successful installation on a mobile device, run an application.
First choose a profile.

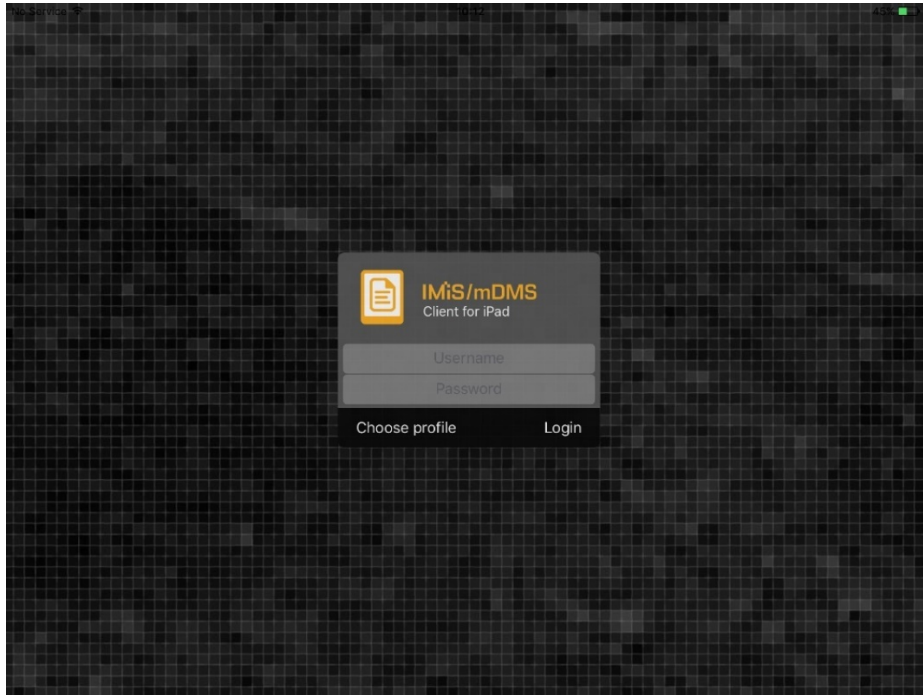


Image 4: Choosing profile of the IMiS®/mDMS Client application

3. When a list of available profiles opens, add a new profile by clicking »Add«.

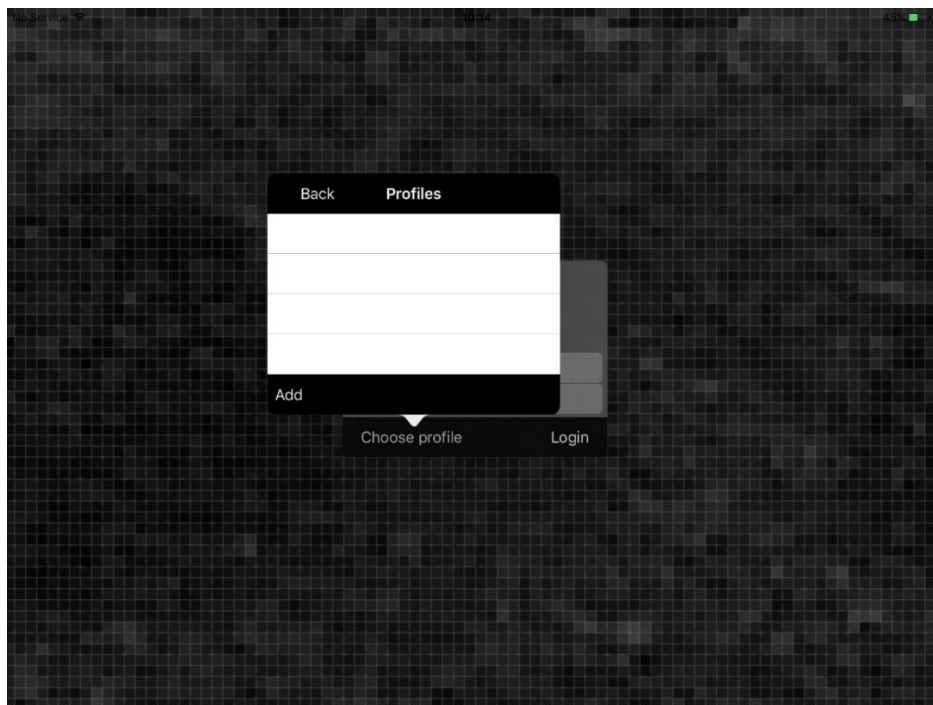


Image 5: Adding new profile

4. When the profile's dialogue box opens, insert the following data.

- Name: any profile name.
- Service address: web service address.
- Option: a possibility to ensure a higher security level.

The following options are available within the »Credentials store«:

- »Off« : username and password from the previous login are not shown at the next login.
- »Save username«: username from the previous login is saved in unencrypted form and shown at the next login.
- »Save credetials«: username and password from the previous login is saved in unencrypted form and shown at the next login.
- »Protect saved credentials«: username and password are saved in encrypted form.

They are protected with a passcode or a finger print (if the device supports this functionality). After setting the access code the user can access the application without entering a username or password.

The user confirms the entry by clicking »Back«.

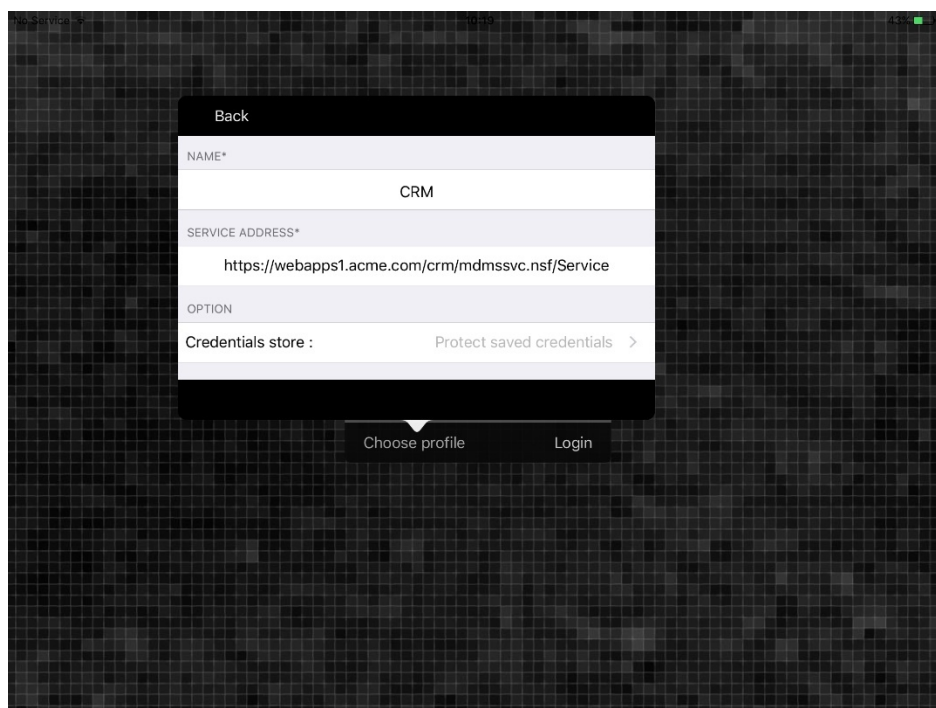


Image 6: Inserting data for creating new profile

5. The user selects and ticks the chosen profile. In case of a new profile, it is automatically ticked. If the user wishes to correct the profile data, he selects »Settings«.
- The user confirms the entry by clicking »Back«.

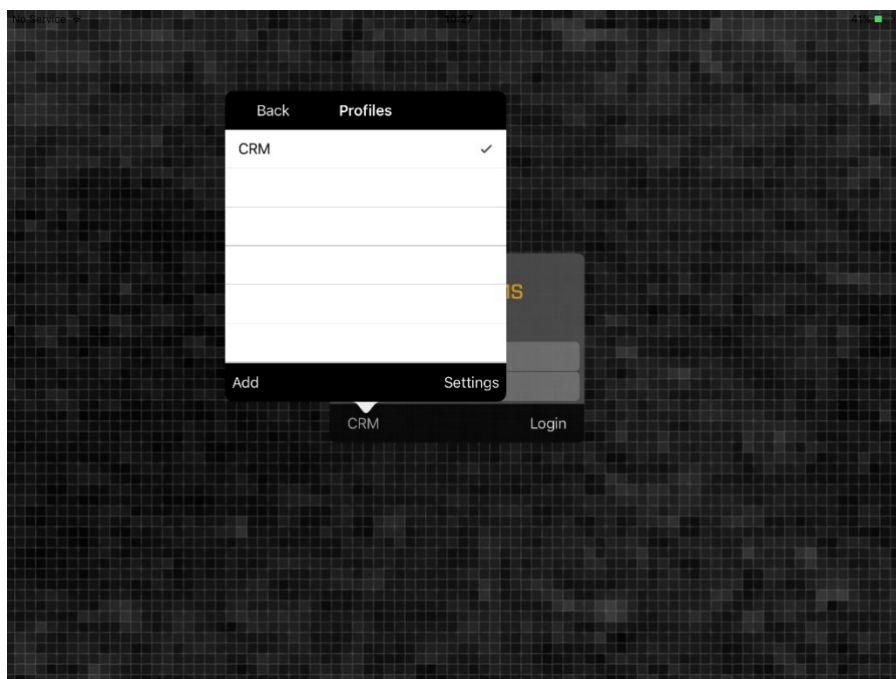


Image 7: Selecting the chosen profile

6. The user inserts username and password and confirms login by clicking »Login«.

Warning: In case the service requires a VPN Client, the user should run it beforehand (e.g. Cisco AnyConnect).

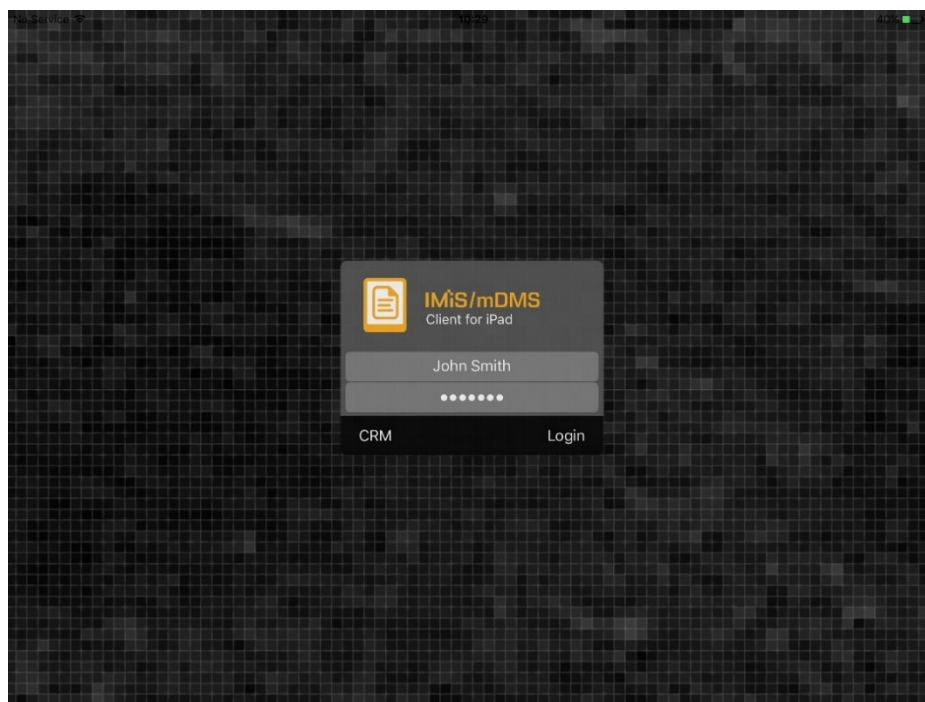


Image 8: Login into the IMiS®/mDMS Client application

4.3 Setting up operation on the Android mobile device

For an IBM Notes application operation setup on a Android mobile device, the user takes the following steps at the mobile device:

1. Install the IMiS®/mDMS Client application from Google Play:
<https://play.google.com/store/apps/details?id=com.imis.iDMS>.

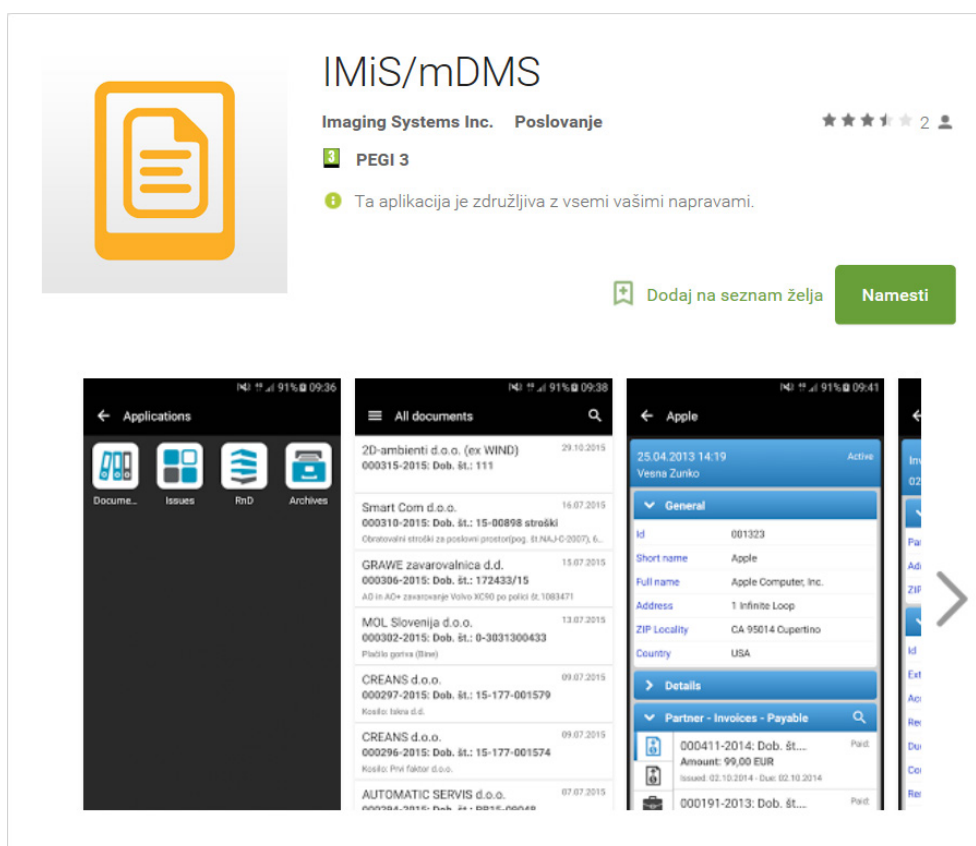


Image 9: The presentation page of the IMiS®/mDMS Client application on Google Play

2. After a successful installation on a mobile device, run an application.
First choose a profile.

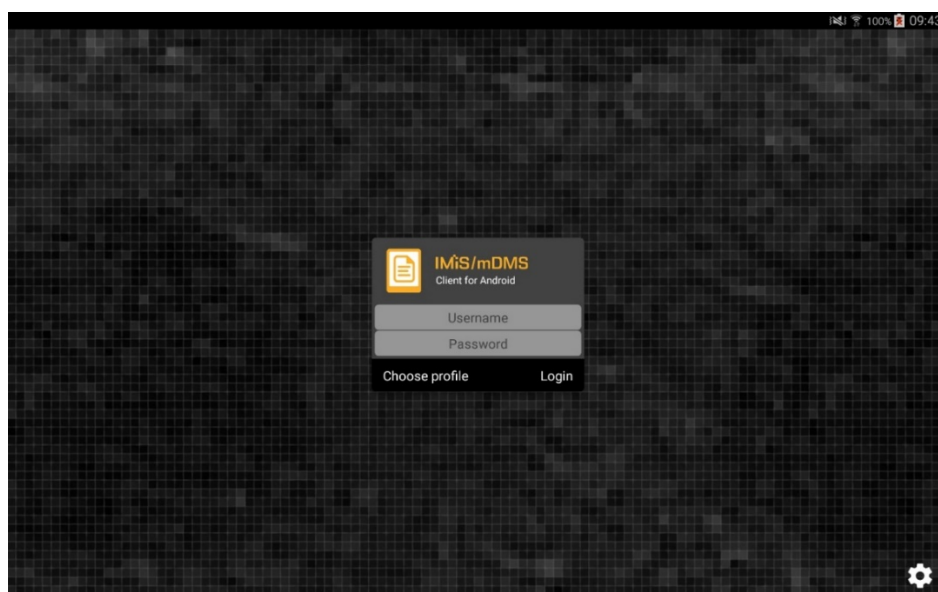


Image 10: Choosing profile of the IMiS®/mDMS Client application

3. When a list of available profiles opens, add a new profile by clicking »+«.




Image 11: Adding new profile

4. When the profile's dialogue box opens, insert the following data.

- Name: any profile name.
- Service address: web service address.
- Option: a possibility to ensure a higher security level.

The following options are available within the »Credentials store«:

- »Off« : username and password from the previous login are not shown at the next login.
- »Save username« : username from the previous login is saved in unencrypted form and shown at the next login.
- »Save credentials«: username and password from the previous login is saved in unencrypted form and shown at the next login.

The user confirms the entry by clicking .

 A dark-themed header bar with a back arrow on the left, the text 'Create profile' in the center, and the text 'SAVE' on the right. Below the header, there are three input fields: 'Name*' with the value 'CRM', 'Service address*' with the value 'https://webapps1.acme.com/crm/idmssvc.nsf/Service', and 'Options' with the value 'Credentials store'. Below the 'Options' field, there is a sub-section 'Save credentials' with a radio button.

Image 12: Inserting data for creating new profile

5. The user selects and ticks the chosen profile. In case of a new profile, it is automatically ticked. If the user wishes to correct the profile data he selects »Settings«.

The user confirms the entry by clicking  (Back).



Image 13: Selecting the chosen profile

6. The user inserts username and password and confirms login by clicking »Login«.

Warning: In case the service requires a VPN Client, the user should run it beforehand (e.g. Cisco AnyConnect).

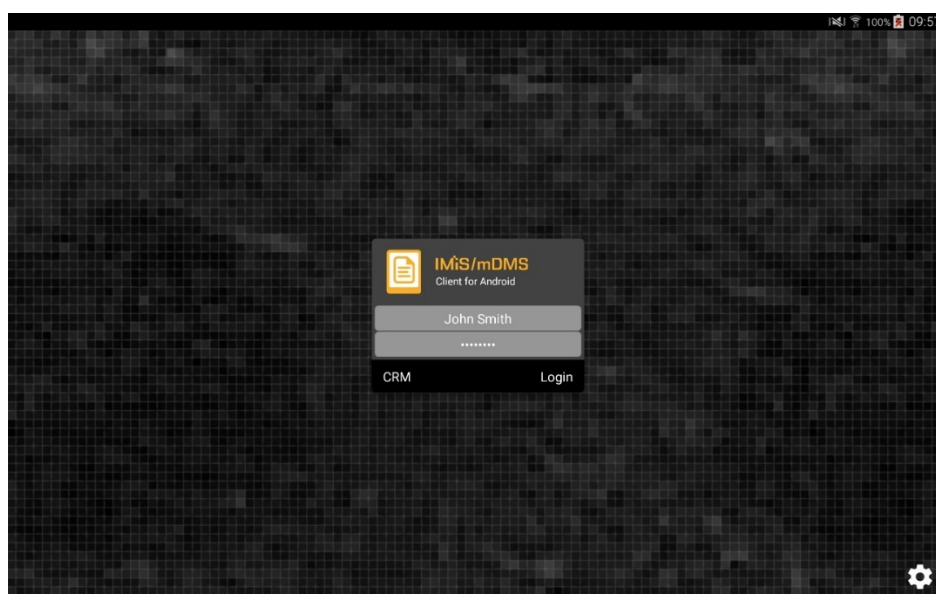


Image 14: Login into the IMiS®/mDMS Client application

4.4 Example of use

Below you will find an example of the adaption of the desktop IBM Notes application for operation on a mobile device on a simple CRM application.

CRM application is used for simple CRM processes such as tracking sales activities and entering metadata for statistics and CRM decisions.

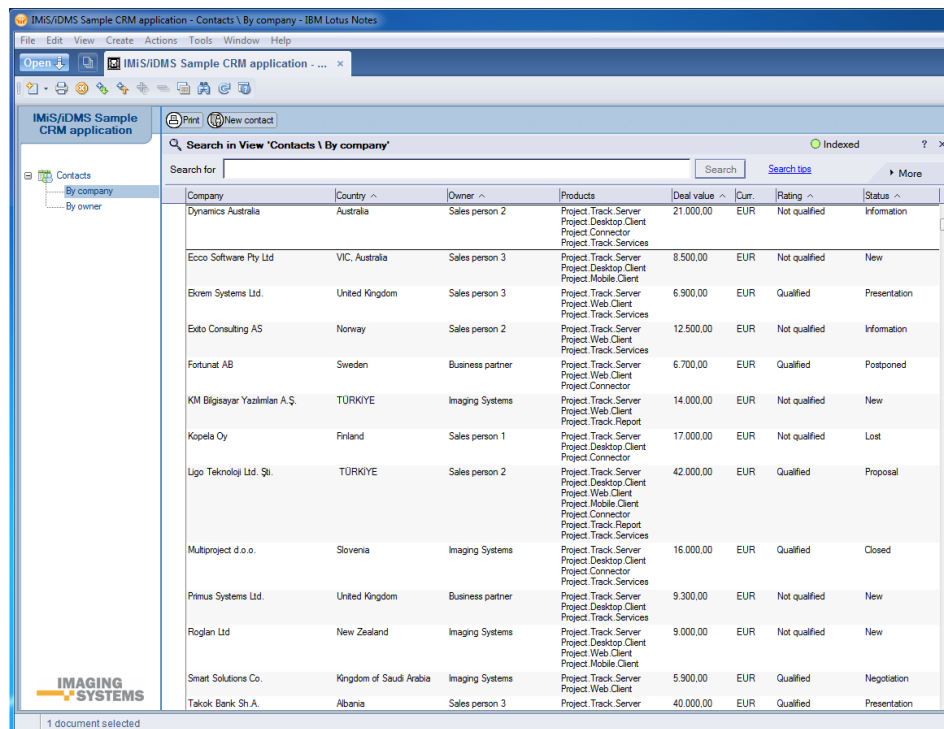
IBM Notes desktop CRM application user enters data about a lead, source and keeper of the contact and lead specifics. He enters correspondence data in the sales contact document and optionally adds digital content (attachments) such as PDFs, etc. Correspondence can then be accessed contextually via multiple categories. The user can search for data via full text search feature.

Typical mobile user of the simple CRM application can leverage his mobile device to coordinate and supervise the sales team actions and performance.

Due to the nature of its work he can view and also edit certain field values, and add comments.

4.4.1 Startup and use of the desktop application

At startup, the user of the CRM application displays the list of sales contacts.



The screenshot shows the 'IMiS/mDMS Sample CRM application - Contacts \ By company - IBM Lotus Notes' window. The interface includes a menu bar (File, Edit, View, Create, Actions, Tools, Window, Help), a toolbar with icons for Open, Save, Print, and others, and a left-hand navigation pane with 'Contacts' and 'By company' options. The main area displays a table of contacts with columns: Company, Country, Owner, Products, Deal value, Curr, Rating, and Status. A search bar is located above the table.

Company	Country	Owner	Products	Deal value	Curr	Rating	Status
Dynamics Australia	Australia	Sales person 2	Project Track Server Project Desktop Client Project Connector Project Track Services	21.000,00	EUR	Not qualified	Information
Ecco Software Pty Ltd	VIC, Australia	Sales person 3	Project Track Server Project Desktop Client Project Mobile Client Project Track Services	8.500,00	EUR	Not qualified	New
Borem Systems Ltd.	United Kingdom	Sales person 3	Project Track Server Project Web Client Project Track Services	6.900,00	EUR	Qualified	Presentation
Edto Consulting AS	Norway	Sales person 2	Project Track Server Project Web Client Project Track Services	12.500,00	EUR	Not qualified	Information
Fortunat AB	Sweden	Business partner	Project Track Server Project Web Client Project Track Report Project Track Services	6.700,00	EUR	Qualified	Postponed
KM Bilgisayar Yazilimlan A.Ş.	TURKIYE	Imaging Systems	Project Track Server Project Web Client Project Track Report Project Connector	14.000,00	EUR	Not qualified	New
Kopela Oy	Finland	Sales person 1	Project Track Server Project Desktop Client Project Connector	17.000,00	EUR	Not qualified	Lost
Ligo Teknoloji Ltd. Şti.	TURKIYE	Sales person 2	Project Track Server Project Desktop Client Project Web Client Project Mobile Client Project Connector Project Track Report Project Track Services	42.000,00	EUR	Qualified	Proposal
Multiproject d.o.o.	Slovenia	Imaging Systems	Project Track Server Project Desktop Client Project Connector Project Track Services	16.000,00	EUR	Qualified	Closed
Primus Systems Ltd.	United Kingdom	Business partner	Project Track Server Project Desktop Client Project Track Services	9.300,00	EUR	Not qualified	New
Roglan Ltd	New Zealand	Imaging Systems	Project Track Server Project Desktop Client Project Mobile Client Project Connector	9.000,00	EUR	Not qualified	New
Smart Solutions Co.	Kingdom of Saudi Arabia	Imaging Systems	Project Track Server Project Web Client Project Mobile Client	5.900,00	EUR	Qualified	Negotiation
Takok Bank Sh.A.	Albania	Sales person 3	Project Track Server	40.000,00	EUR	Qualified	Presentation

Image 15: Overview of business contacts of CRM application

Left navigation enables user to sort the contacts according to certain criteria.

Search bar above contacts can be used to enter a search string. User can add business contacts, print them, etc...

Fortunat AB	Sweden	Business partner	Project Track Server Project Web Client Project Connector	6.700,00	EUR	Qualified	Postponed
-------------	--------	------------------	---	----------	-----	-----------	-----------

Image 16: An example of a business contact in the list of the desktop »CRM« application

The user creates a new business contact and specifies field values.

CONTACT Qualified / Postponed

Lead

Name / Surname:	Mr. Thomas Grönvik	Position:	CEO
Company:	Fortunat AB	Address:	Brunnsgatan 89
Zip / City:	SE-824 26 Hudiksvall	Country:	Sweden
E-mail:	thomas.gronvik@fortunat.se	Web address:	http://www.fortunat.se
No. of employees:	35	Comment:	

Source

Source:	Business partner	Detail:	Releye AB
---------	------------------	---------	-----------

Owner

Owner:	Business partner	Detail:	
--------	------------------	---------	--

Deal

Product(s):	Project.Track.Server Project.Web.Client Project.Connector	Deal value:	6.700,00 EUR
-------------	---	-------------	--------------

Correspondence

All | By type | Add | Remove

Created	Author	Type	Attachments	Content
03. 01. 2017 10:28:53	Iztok Zuzek	Phone call		Mr. John Smith called this morning. He mentioned discussion about our products on board meeting. In two weeks they expect our offer for our Suite of products.
19. 11. 2015 13:26:28	Marko Hren	Email		Hello, it is not interesting for us. Have a nice day! Med vänliga hälsningar Thomas Grönvik
19. 11. 2015 13:25:53	Marko Hren	Email		Sent information about product.
19. 11. 2015 13:24:34	Marko Hren	Phone call		We discussed about the solution. He requested additional information.
18. 11. 2015 10:10:56	Marko Hren	Document	IMiS letter_Fortunat_Gronvik.pdf	Dear Thomas, recently I wrote you a letter about consulting opportunities in the area of project tracking (see attached). What sets this solution apart from others is its integration capabilities with email platforms, including

1 document selected

Image 17: An example of the data of the business contact in a desktop »CRM« application

The user of the desktop application adds new or changes existing correspondence and deletes only that which he created. He can view the entire correspondence or view it contextually depending on the type.

Correspondence

All | By type | Phone call | Document | Email | Presentation

Add | Remove

Created	Author	Attachments	Content
18. 11. 2015 10:10:56	Marko Hren	IMiS letter_Fortunat_Gronvik.pdf	Dear Thomas, recently I wrote you a letter about consulting opportunities in the area of project tracking (see attached). What sets this solution apart from others is its integration capabilities with email platforms, including Microsoft Outlook, Lotus Notes and Web based email systems such as Gmail. The integration provided by our Web based software offers your strategic Project management solution unique workflow opportunities as well as improved communication. Integrating your project

Image 18: Viewing the entire correspondence in a desktop application or view it contextually depending on the type

By clicking the correspondence in the desktop IBM Notes application, the new document displays the whole text including the attachment.

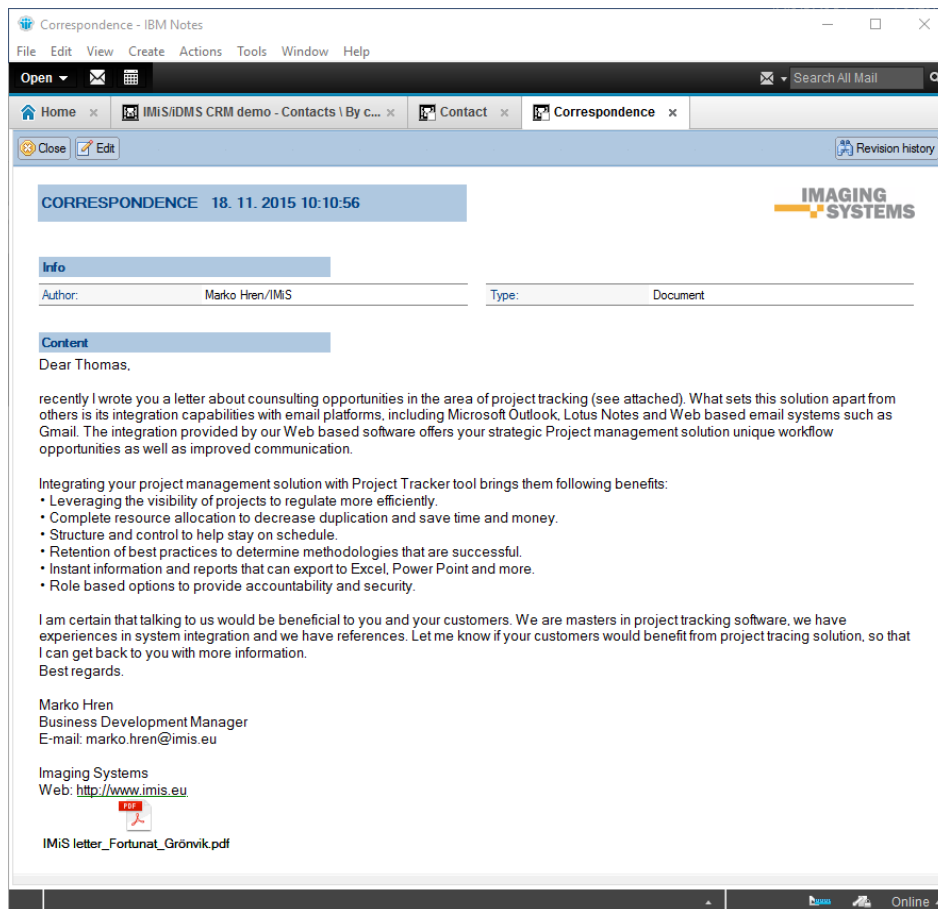


Image 19: Viewing the correspondence with the option to open attachments in the desktop application

The user of the desktop application can search through the full text of the entered data on business contacts.

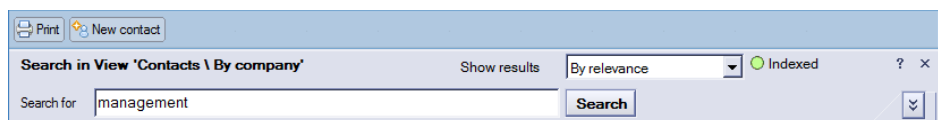


Image 20: Entering a search string in the desktop »CRM« application

In the list in the desktop IBM Notes application the user is displayed the search results.

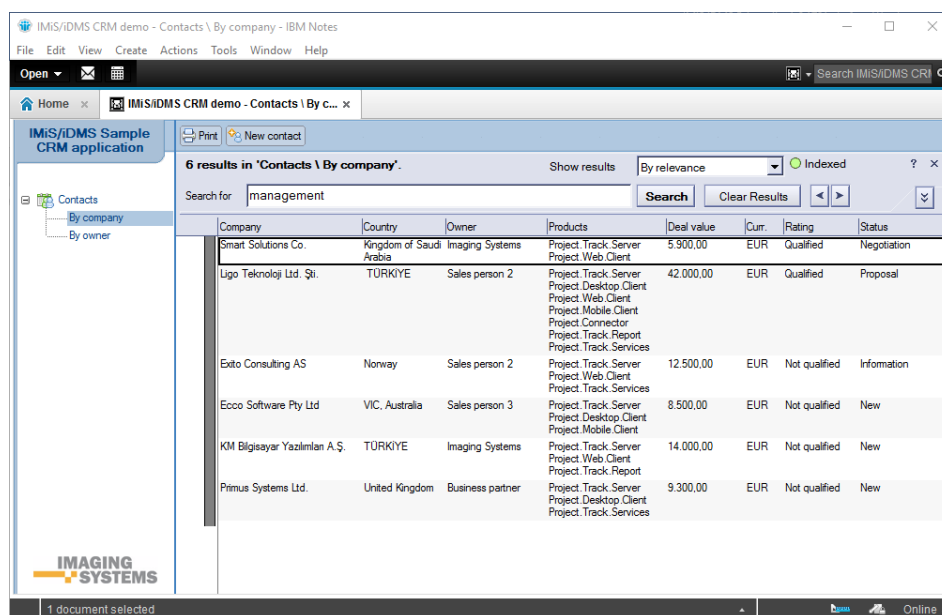


Image 21: The list of search results in the desktop »CRM« application



Image 22: The search string in the data on business contact

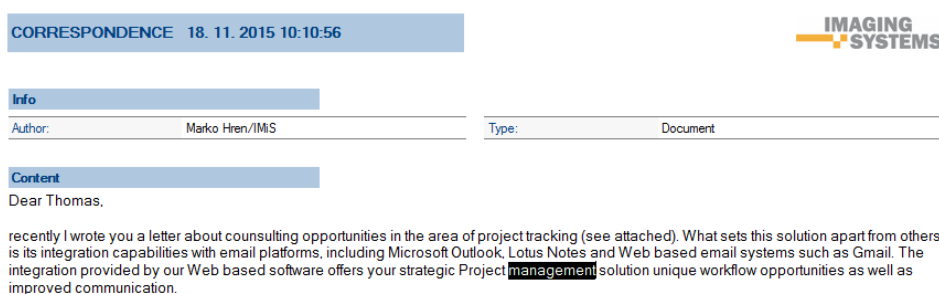


Image 23: Search string in correspondence

4.4.2 Startup and use of the mobile device application

The user of the mobile device selects the appropriate profile, enters his username and password, and logs in the »CRM« application.

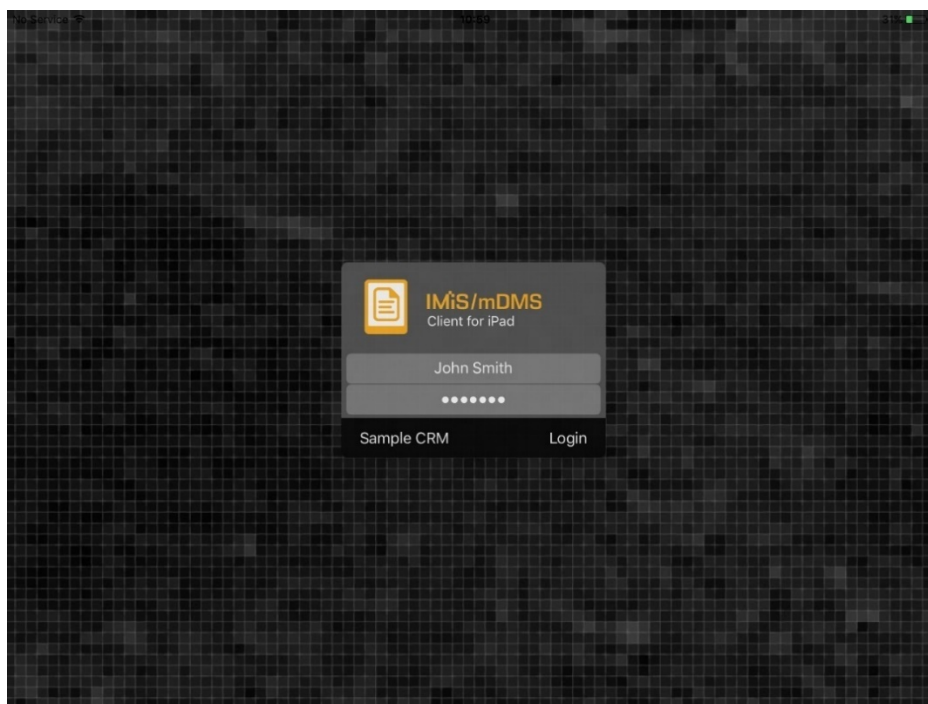


Image 24: Login to the »CRM« application via a mobile device

After a successful login, the user selects the icon of the »CRM« application.

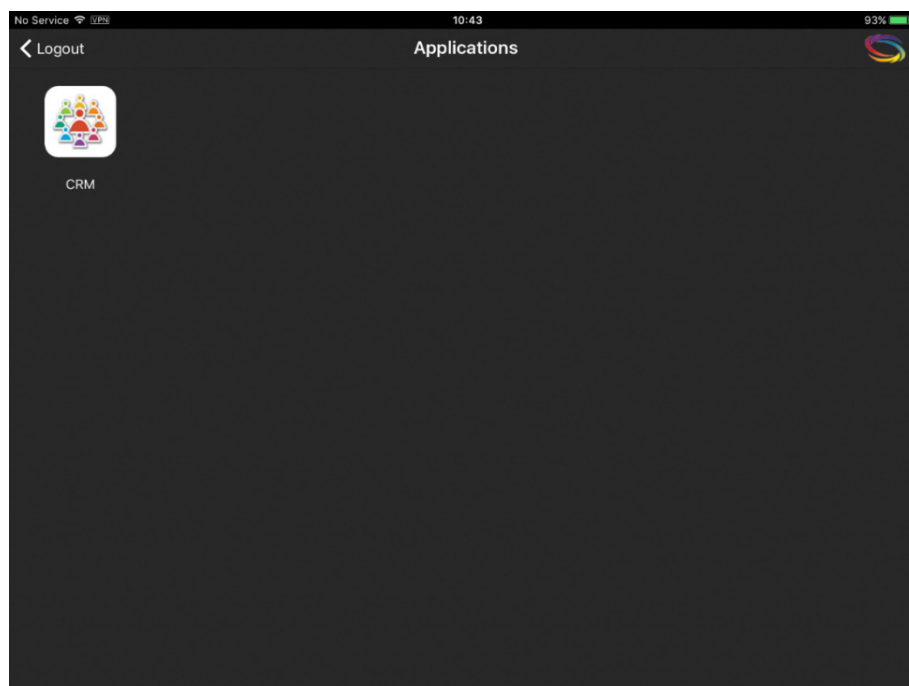


Image 25: CRM application launching by pressing on the application icon

Similarly, as in Desktop version of the application, the list of contacts is also displayed in the mobile version.

Contacts by company		
	Dynamics Australia Australia Rating: Qualified, Status: Information	21.000,00 EUR
	Ecco Software Pty Ltd VIC, Australia Rating: Not qualified, Status: New	8.500,00 EUR
	Ekrem Systems Ltd. United Kingdom Rating: Qualified, Status: Presentation	6.900,00 EUR
	Exito Consulting AS Norway Rating: Not qualified, Status: Information	12.500,00 EUR
	Fortunat AB Sweden Rating: Qualified, Status: Postponed	6.700,00 EUR
	KM Bilgisayar Yazılımları A.Ş. TÜRKİYE Rating: Not qualified, Status: New	14.000,00 EUR
	Kopela Oy Finland Rating: Not qualified, Status: Lost	17.000,00 EUR
	Ligo Teknoloji Ltd. Şti. TÜRKİYE Rating: Qualified, Status: Proposal	42.000,00 EUR
	Multiproject d.o.o. Slovenia	16.000,00 EUR

Image 26: List of sales contacts viewed on mobile version of CRM application

In the IMiS®/mDMS Client application configuration the user with appropriate rights can modify the appearance of the application for operation on a mobile device. This also determines which fields will be displayed and where.

	Fortunat AB Sweden Rating: Qualified, Status: Postponed	6.700,00 EUR
--	--	--------------

Image 27: Data display customization on mobile device

CONTACT

Qualified / Postponed

Lead

Name / Surname	Mr. Thomas Grönvik	Position	CEO
Company	Fortunat AB	Address	Brunnsgatan 89
Zip / City	SE-824 26 Hudiksvall	Country	Sweden
E-mail	thomas.gronvik@fortunat.se	Web address	http://www.fortunat.se
No. of employees	35	Comment	

> Source

▼ Owner

Owner: Business partner

Detail

▼ Deal

Product(s): Project.Track.Server, Project.Web.Client, Project.Connector

Deal value: 6.700,00 EUR

> Correspondence

> History

Image 28: An example of a sales contact displayed in Desktop version of CRM application

Based on the configuration of IMiS®/mDMS Service application, user with appropriate rights can specify which contact data can be changed by the user of the mobile device. More information about the settings are available in [chapter 6.1.2 Configuration](#).

CONTACT

Qualified / Postponed

Lead

Name / Surname	Mr. Thomas Grönvik	Position	CEO
Company	Fortunat AB	Address	Brunnsgatan 89
Zip / City	SE-824 26 Hudiksvall	Country	Sweden
E-mail	thomas.gronvik@fortunat.se	Web address	http://www.fortunat.se
No. of employees	35	Comment	

> Source

Edit

Add correspondence

Image 29: An example how a mobile user can choose a modification action

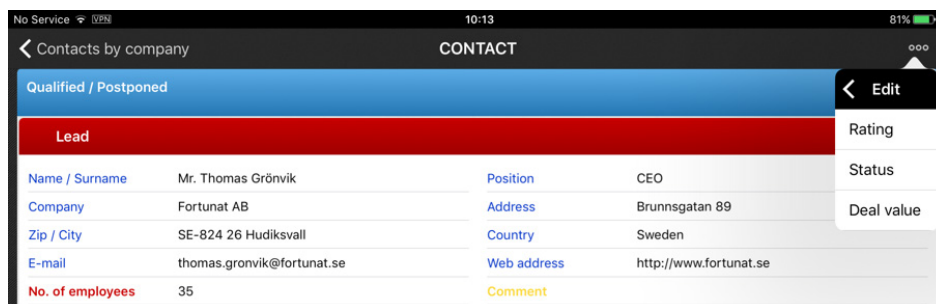


Image 30: An example how a mobile user changes data on mobile device

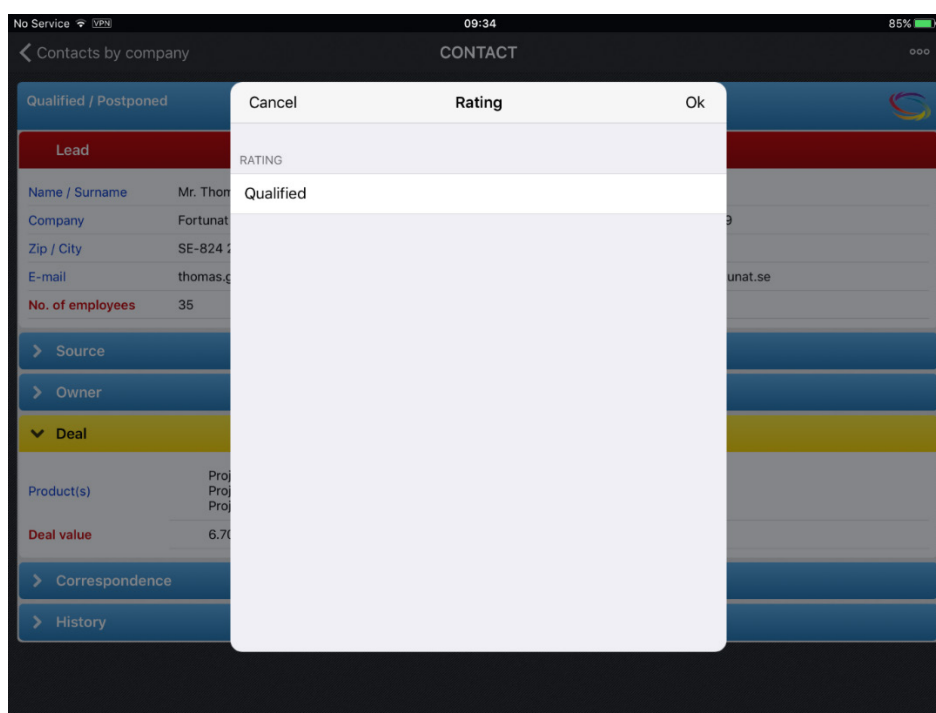


Image 31: An example of a selection of predetermined modifiable data on the mobile device

In configuration, the user with appropriate rights defines how the data sections will be displayed, which fields are going to be surfaced, etc. Certain fields can be hidden to the mobile user, if they're not applicable to the mobile version of the application.

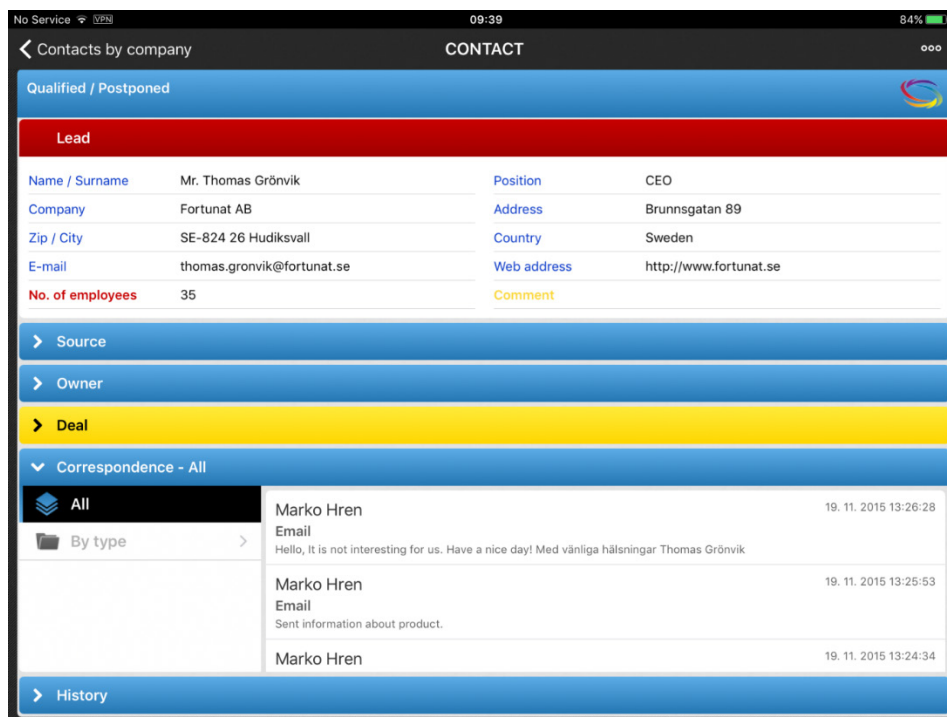


Image 32: The appearance of the application on a mobile device

Similar to desktop application, a user of the mobile device is displayed the entire correspondence. He can also select a contextual view based on type of correspondence.

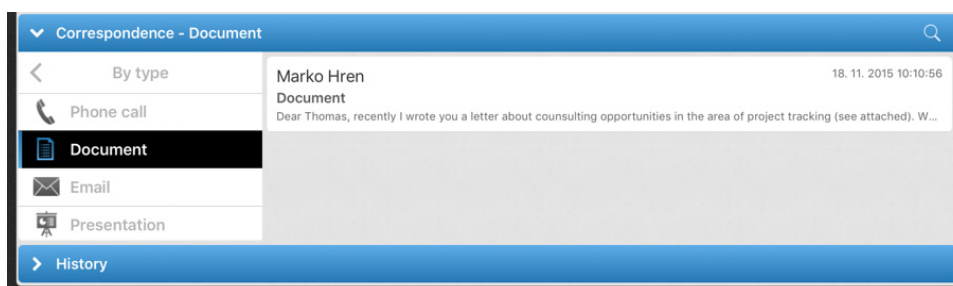


Image 33: Contextual view of sales correspondence displayed on mobile device

Depending on the settings in the IMiS®/mDMS Service application configuration, a user of the mobile device is enabled to add correspondence.

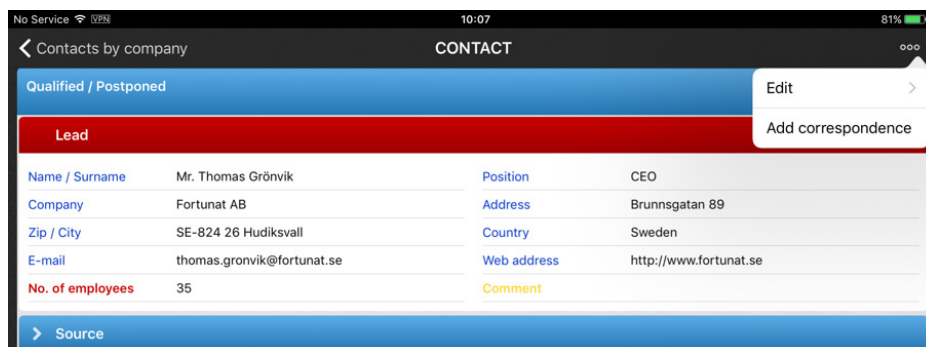


Image 34: An example of choosing »Add correspondence« on mobile device

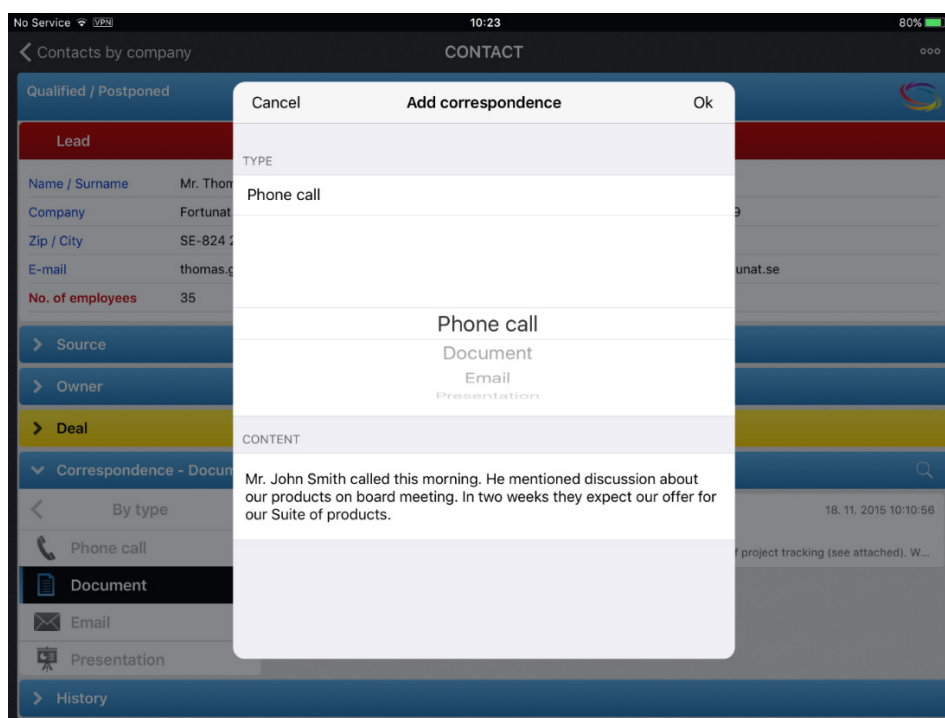


Image 35: An example of adding new correspondence record on mobile device

By selecting certain correspondence, a user moves to the next view with a more detailed description. If attachments are available, the user can open them in the default application.

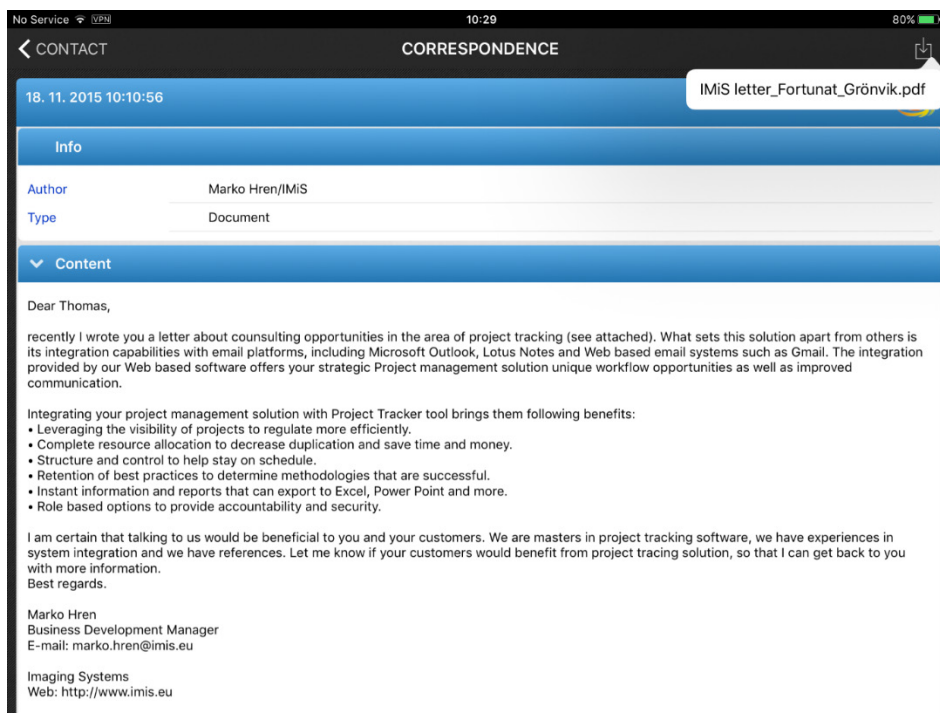


Image 36: Correspondence review with the option of opening attached content on mobile device

Similar to the desktop application, a mobile user can search through full text index for data using the Search icon.

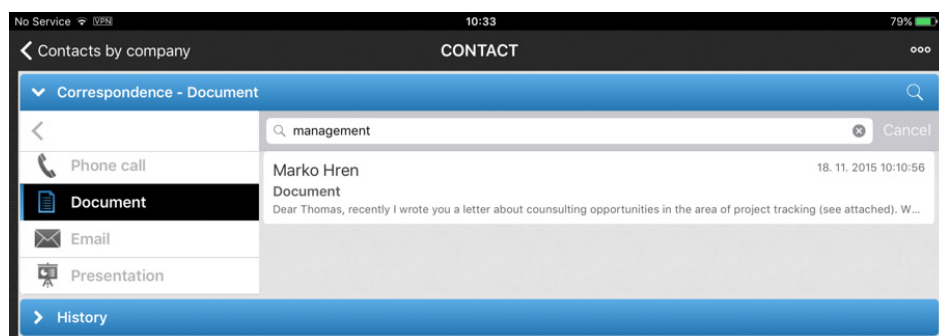


Image 37: Searching for data using full text index on mobile device

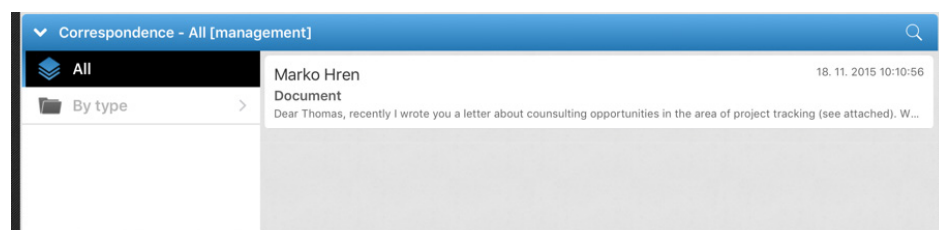


Image 38: Full-text search results display on mobile device

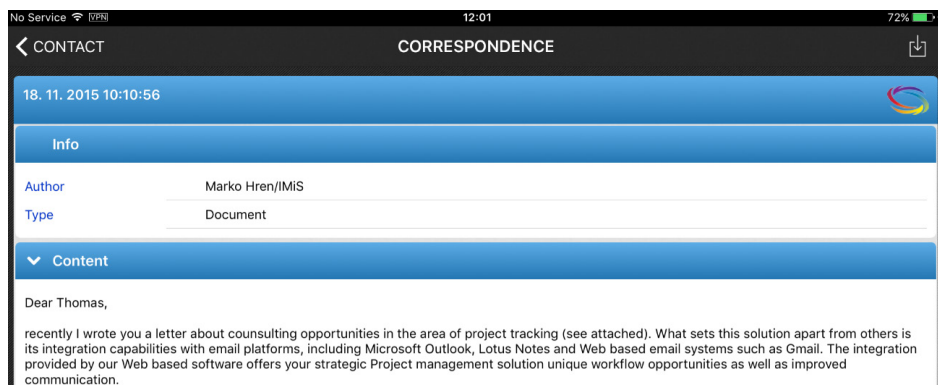


Image 39: A search query on a mobile device

5 Administration interface

5.1 General

The administration interface IMiS®/mDMS Service is intended for IMiS®/mDMS Client configuration for mobile device operation.

This chapter covers the following topics:

- Administration interface generation.
- Administration interface view.
- Administration interface access rights.
- Administration interface document actions.

Connecting configuration documents

Configuration documents are connected. For document identification, the »id« field is used. It is written in every document and defined when created. The content of the field is a result of the »@DocumentUniqueID« function. Keep in mind that when copying documents from one database to another through clipboard, the document »id« changes, but the value of the »id« field remains the same as it is the base for connecting.

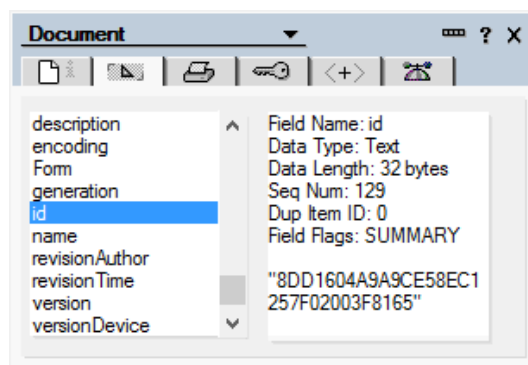


Image 40: Display of the value of »id« field

5.2 Administration interface generation

The IMiS®/mDMS Service database is generated from the sample IMiS®/mDMS Service database.

The database is generated on an IBM Domino server, where administrator can access application databases referenced in the administration interface.

Usually, administrators choose a server and a folder with application databases.

It is advisable to include the version of the administration interface or the application the administration interface references, in the title.

Database access rights are described in detailed in [chapter 5.4 Administration interface access rights](#).

5.3 Administration interface view

Place a »IMiS®/mDMS Service« icon representing administration interface, on a worksheet.

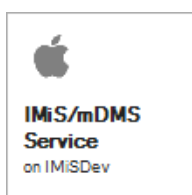


Image 41: IMiS®/mDMS Service icon

The basic administration interface appears on the screen.

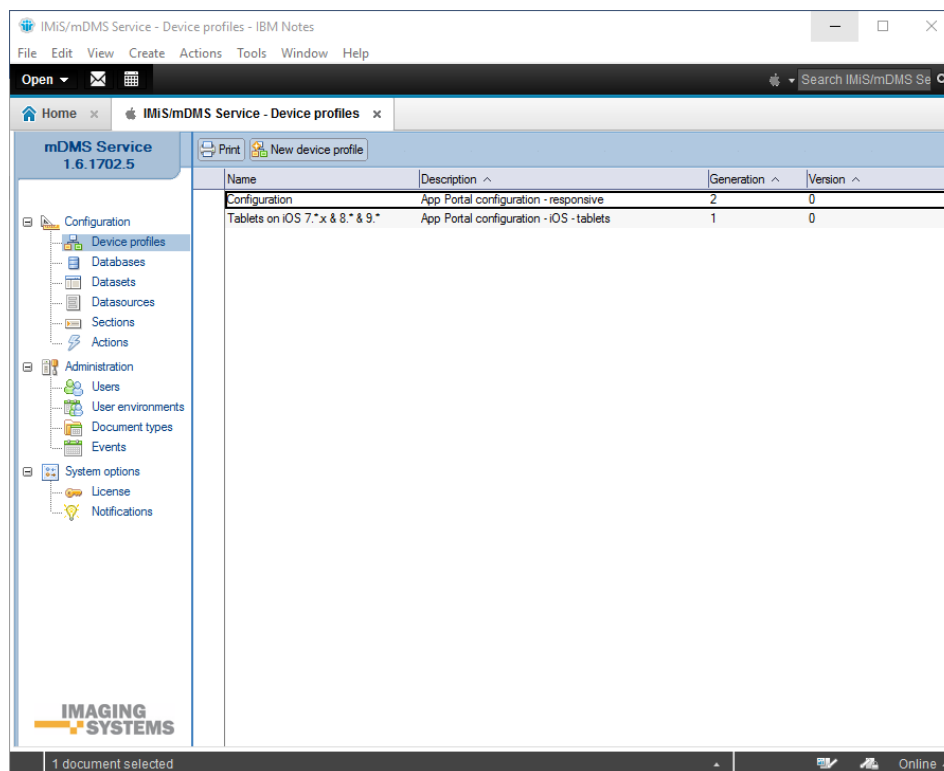


Image 42: Administration interface view

The navigator allows you to select index.

[Configurations] Configuration documents that specify appearance of an application on a mobile device.

The following options are available to the user:

[Device profiles] Mobile device profile settings.

[Databases] A list of NSF databases.

[Datasets] Configuration documents that specify document lists.

[Datasources] Configuration documents that specify the content of a document.

[Sections] Sections you reference in various configuration documents.

[Actions] Specifying document actions.

[Administration] Application administration.

The following options are available to the user:

[Users] Users administration.

[User environments] User environment administration.

[Document types] A list of supported file types (attachments and IMiS® objects).

[Events] Event logging.

[System options] System settings for application management.

The following options are available to the user:

[License] License key information.

[Notification] Notification data for users.

5.4 Administration interface access rights

The application recognizes three user types:

- Settings viewers.
- Settings editors.
- Administrators.

Settings viewers

Read rights are sufficient. They require the right to write public documents, so they can create bookmarks about errors and warnings which are public documents.

Settings editors

They require at least IMiS®/mDMS Service database editing rights. The concept of author fields is not supported, so copyrights do not suffice.

Administrators

They require IMiS®/mDMS Service database operating rights.

The database has to be available online. In terms of web functionality, functionality does not predict document creating or editing. Hence, it is advisable that when determining an Access Control List, the database is »Maximum Internet name and password« on »Reader«.

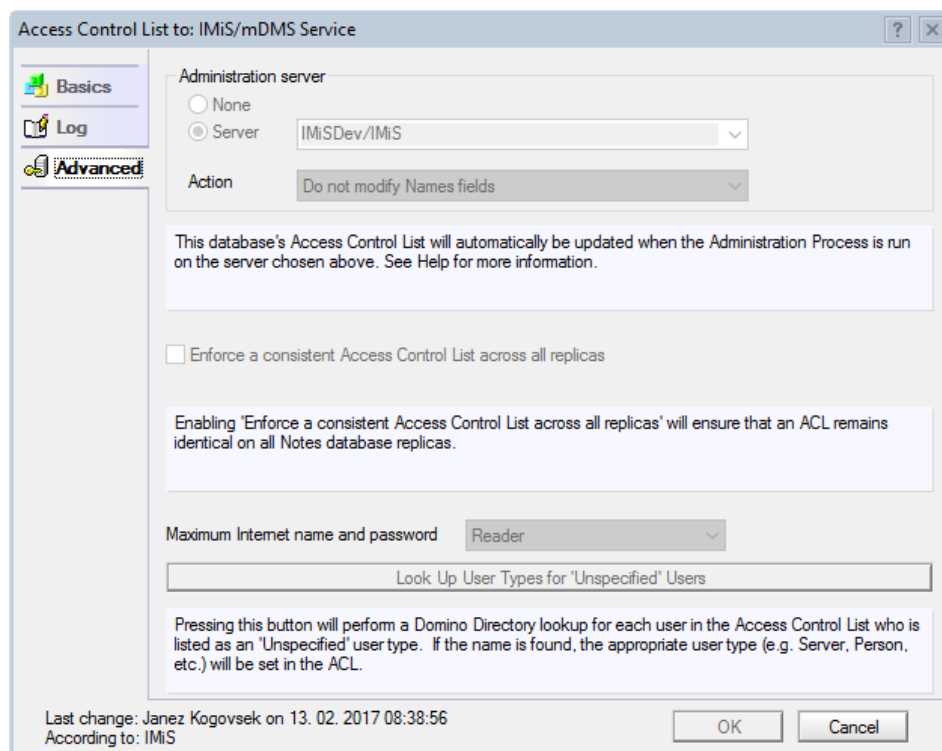


Image 43: Establishing access level in »Maximum Internet name and password«

Besides creating configuration documents, IMiS®/mDMS Service database is intended for request execution as forwarded from a mobile device. Requests are implemented by the web service provider »Service«. Its default option is »Run as a web user« in order to have traceable request execution. Consequently, appropriate access rights to application databases the users will access (indirectly through the administration database), need to be provided for all possible service users.

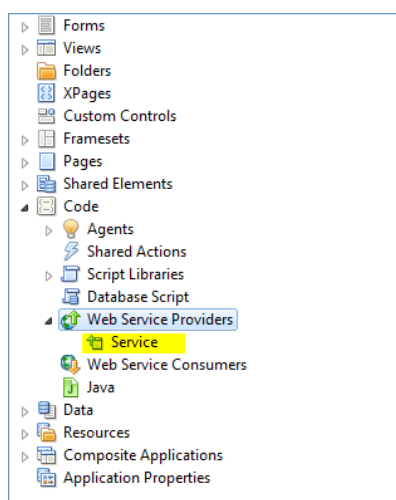


Image 44: Web service provider »Service«

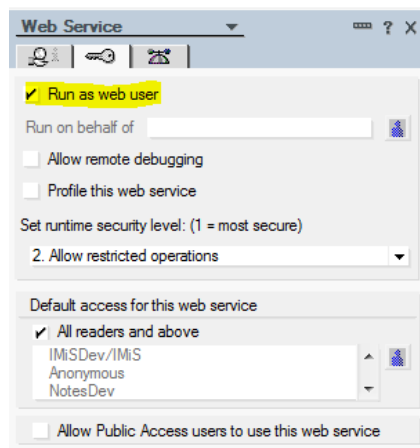


Image 45: Specifying user context

5.5 Administration interface actions

Index actions and Document actions are available.

Index actions

[Print] Printing one or more selected documents.

[New <document type>] Generating a new configuration document.

<document type> = [configuration|dataset|datasource|section|action]

The action is available if the user has full editing rights in the database.

Document actions

[Edit] Enabling editing of individual field values in a document.

The action is available in view mode if the user has full editing rights in the database.

[Save] Saving the settings of the current document.

The action is available in editing mode.

[Close] Closing the current document.

6 CONFIGURATION

The »**Configurations**« section deals with configurations that define the appearance of an application on a mobile device.

Configuration structure is as follows:

- Image (base64 format, URL)
- String (localized string of characters)
- Bundle (localization of images and strings)
- Transport (response time)
- Session (allowed time)
- Style (global, class)
- Page (portal, page, item)
- View (view, navigation view, table view)
- Document (section, document)
- Section (column, row, content).

6.1 Device profiles

In the section »**Device profiles**« the user sets profiles. A profile refers to the application version and data on the mobile device that is using the application.

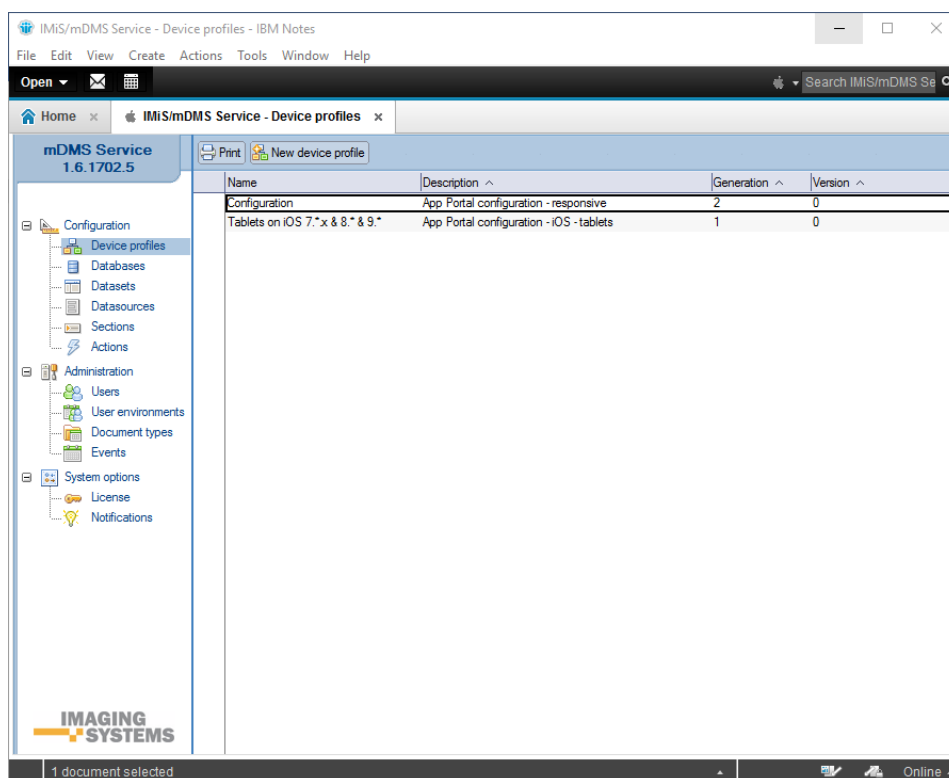


Image 46: View of the »Device profiles« section

The document fields are divided into the following headers:

- »Basic information«.
- »Configuration«.

6.1.1 Basic information

The »Basic information« header specifies the name of configuration to access the mobile device.

Basic information			
Name:	Configuration	Description:	App Portal configuration - responsive
Generation:	2	Version:	0
Condition: <@>		Traffic disposition:	Normal

Image 47: View of settings in the »Basic information« header

[Name] Name of configuration. Data is required.

[Generation] Configuration generation. If the configuration scheme changes to such an extent that it is not compliant with the previous one, then configuration generation enhancement is advised. The field is required and it must be a non-negative integer.

[Condition <@>] The formula with which the user specifies a condition under which a user can access the current profile. The result of the formula is true or false. Data is required.

The following virtual variables can be used:

- \$application.version
- \$application.locale
- \$application.mode
- \$device.os
- \$device.manufacturer
- \$device.model
- \$device.processor
- \$device.screen.x.resolution
- \$device.screen.x.dpi
- \$device.screen.y.resolution
- \$device.screen.y.dpi

Image 48: The available virtual variables in the »Condition« field

Virtual variable	Description	Example
\$application.version	Application version	1.5.1611.26
\$application.locale	Application locale	en-US
\$application.mode	Application mode	TABLET
\$device.os	Device operating system	iPhone OS 9.3.5
\$device.manufacturer	Device manufacturer	Apple
\$device.model	Device model	iPad 3.3
\$device.processor	Device processor	ARM
\$device.screen.x.resolution	Device screen X resolution	2048
\$device.screen.x.dpi	Device screen X dpi	264
\$device.screen.y.resolution	Device screen Y resolution	1536
\$device.screen.y.dpi	Device screen Y dpi	264

Image 49: The translation table between virtual variables and descriptions

[Description] Description of configuration. Data is not required.

[Version] Configuration version. If there is a slight change in configuration, then configuration version enhancement is advised. The field is required and must be a non-negative integer.

[Traffic disposition] Mode of data forwarding to a mobile device.

The following options are available to the user:

- The »Normal« option is typically used in a development and testing phase, when a developer is testing whether a mobile device's reaction is expected.
- The »GZip compression« option is used in production, as it is vital that the reaction is as fast as possible because of compressed data. Data is required.

»GZip compression« is used in data sharing.

6.1.2 onfiguration

The »Configuration« header specifies application appearance on a mobile device.

```

Configuration
<config>
  <session timeout="3600"/>
  <resbundle locale="en-US">
    <image id="LOGO">
      <body>iVBORw0KGgoAAAANSUHEUgAAAC0AAAAgCAYAAACGhPFEEAAAAGXRFWHRTb2Z0d2FyZQBBZG9iZSBJ
      bWFnZVJlYWR5ccllPAAAAxPvFh0WE1MOmNvbS5hZG9iZS54bXAAAAAADw/eHBhY2tldCBiZWdp
      bj0i77u/IiBpZD0iVzVNME1wQ2VoaUh6cmVtek5UY3prYz1kIj8+IDx4OnhtcG1ldGEgeG1sbnM6
      eD0iYWRvYmU6bnM6bWV0YS8iIHg6eG1wdG9iKfkb2JlIFhNUCBDb3JlIDUuMy1jMDExIDY2LjE0
      NTY2MSwgMjAxMi8wMi8wNi0xND01NjoyNyAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAg
      dHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj4gPHJkZj4pEZXNjcmlw
      dGlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wTU09Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEu
      MC9tbS8iIHhtbG5zOnN0UmVmPSJodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvc1R5cGUvUmVz
      b3VyY2VSZWYjIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iIHhtcE1N
      OkRvY3VtZW50SUQ9InhtcC5kaWQ6ODI4MDhFMjg5NzVEMTFFNTkzRkU4Qzg2NENDNjc3MzgiIHht
      cE1NOkluc3RhbmlN1SUQ9InhtcC5kaWQ6ODI4MDhFMjg5NzVEMTFFNTkzRkU4Qzg2NENDNjc3Mzgi
      IHhtcDpDcmVhdG9yVG9ybD0iQWRvYmU6bWV0YS8iIHg6eG1wdG9zaG9wIENINiBXaW5kb3dzIj4gPHhtcE1NOkRl
      cm12ZW50SUQ9InhtcC5kaWQ6ODI4MDhFMjg5NzVEMTFFNTkzRkU4Qzg2NENDNjc3MzgiIHhtcDpDcmVhdG9yVG9ybD0iQWRvYmU6bWV0YS8iIHg6eG1wdG9zaG9wIENINiBXaW5kb3dzIj4gPHhtcE1NOkRl
    </body>
  </image>
  <image id="PORTAL-ICON-DOCS">
    <body>base64 representation of the image</body>
  </image>
  <image id="ICON-CRM">
    <body>base64 representation of the image</body>
  </image>
  <image id="NAVICON-BRIEFCASE">
    <body>base64 representation of the image</body>
  </image>
  <image id="NAVICON-ENVELOPE">
    <body>base64 representation of the image</body>
  </image>
</resbundle>
<page id="portal" root="true" icon="LOGO-PORTAL" titleLabel="Applications" ...>
  <item id="PORTAL_CRM" icon="PORTAL-ICON-DOCS" target="VIEW_CRM" context="">CRM</item>
</page>
<view id="VIEW_CRM" initial="true" navigator="NAV_CRM"... />
<view id="NAV_CRM_EV_contact" navigator="NAV_CRM_EV_contact"/>
<viewNav id="NAV_CRM" ...>
  <item icon="NAVICON-BRIEFCASE" caption="Contacts by company"
target="TABLE_CRM_contactsByCompany" context="" />
  <item icon="NAVICON-ENVELOPE" caption="Contacts by owner"
target="TABLE_CRM_contactsByOwner" context="" />
</viewNav>

```

Image 50: View of application appearance in XML format in the »Configuration« header

[Configuration] Application appearance is written in XML. When saved, the content is compressed so it is ready for forwarding to a mobile device. Data is required.

6.1.2.1 The definition of the of the appearance of the application in XML format

```

<config>
  <transport timeout="60"/>
  <session timeout="3600"/>
  <resbundle locale="en-US">
    <image id="LOGO-PORTAL">
      <body>base64 representation of the image</body>
    </image>
    <image id="PORTAL-ICON-DOCS">
      <body>base64 representation of the image</body>
    </image>
    <image id="ICON-CRM">
      <body>base64 representation of the image</body>
    </image>
    <image id="NAVICON-BRIEFCASE">
      <body>base64 representation of the image</body>
    </image>
    <image id="NAVICON-ENVELOPE">
      <body>base64 representation of the image</body>
    </image>
  </resbundle>
  <page id="portal" root="true" icon="LOGO-PORTAL" titleLabel="Applications" ...>
    <item id="PORTAL_CRM" icon="PORTAL-ICON-DOCS" target="VIEW_CRM" context="">CRM</item>
  </page>
  <view id="VIEW_CRM" initial="true" navigator="NAV_CRM"... />
  <view id="NAV_CRM_EV_contact" navigator="NAV_CRM_EV_contact"/>
  <viewNav id="NAV_CRM" ...>
    <item icon="NAVICON-BRIEFCASE" caption="Contacts by company"
target="TABLE_CRM_contactsByCompany" context="" />
    <item icon="NAVICON-ENVELOPE" caption="Contacts by owner"
target="TABLE_CRM_contactsByOwner" context="" />
  </viewNav>

```

```

<viewNav id="NAV_CRM_EV_contact" ...>
  <item icon="" caption="All" target="TABLE_CRM_EV_CorrespondenceAll" context="" />
</viewNav>
<viewTable id="TABLE_CRM_contactsByCompany" source="DATASET_CRM_contactsByCompany"
tableTitle="Contacts by company" ...>
</viewTable>
<viewTable id="TABLE_CRM_contactsByOwner" source="DATASET_CRM_contactsByOwner"
tableTitle="Contacts by owner" ...>
</viewTable>
<viewTable id="TABLE_CRM_EV_CorrespondenceAll" source="DATASET_CRM_EV_CorrespondenceAll"
tableTitle="Correspondence - All" ...>
</viewTable>
<doc id="DATASOURCE_CRM_contact" titleField="title" idField="idField"
createdField="created" statusField="status" authorField="author" icon="LOGO-DOCHDR-CRM" ...>
  <section id="SECTION_CRM_contact_Lead" title="Lead" .../>
  <section id="SECTION_CRM_contact_Source" title="Source" .../>
  <section id="SECTION_CRM_contact_Owner" title="Owner" .../>
  <section id="EVContact" title="Correspondence" .../>
</doc>
<section id="SECTION_CRM_contact_Lead" type="T" rowOffset="7" contentOffset="1%">
  <col labelWidth="16%" valueWidth="84%">
    <field id="name" type="S" label="Name / Surname" orientation="H"/>
    <field id="company" type="S" label="Company" orientation="H"/>
    <field id="zipCity" type="S" label="Zip / City" orientation="H"/>
    <field id="email" type="S" label="E-mail" orientation="H"/>
  </col>
</section>
<section id="SECTION_CRM_contact_Source" type="T" rowOffset="7" contentOffset="2%">
  <col labelWidth="16%" valueWidth="84%">
    <field id="source" type="D" label="Source" orientation="H"/>
    <field id="sourceInfo" type="S" label="Detail" orientation="H"/>
  </col>
</section>
<section id="SECTION_CRM_contact_Owner" type="T" rowOffset="7" contentOffset="1%">
  <col labelWidth="16%" valueWidth="84%">
    <field id="owner" type="S" label="Owner" orientation="H"/>
    <field id="ownerInfo" type="S" label="Detail" orientation="H"/>
  </col>
</section>
<section id="EVContact" type="W" columnOffset="2%" rowOffset="7">
  <col labelWidth="0%" valueWidth="100%">
    <wrapper id="VIEW_CRM_EV_contact" target="VIEW_CRM_EV_contact"/>
  </col>
</section>
</config>

```

Image 51: An example of the appearance of the application in XML format

6.1.2.2 Structure description of an XML document

6.1.2.2.1 Image

Locally defined binary graphical resource encoded in base64 format.

```

<image id="image Id">
  <body>Format: Base64</body>
</image>

```

Image 52: Structure description of »Image encoded in base64« in XML format

Remote binary graphical resource accessible through its URL.

```
<image id="image Id">
  <url>URL"</url>
</image>
```

Image 53: Structure description of »Image accessible through URL« in XML format

6.1.2.2.2 String

Localized string of characters.

```
<string id="stringId">All</string>
```

Image 54: Structure description of »string« in XML format

6.1.2.2.3 Bundle

It is used for localization of images and strings. If the used localization is not specified in the config markup, Locale="en-US" is used.

```
<resbundle locale="sl-SI">
  <image id= "image ID">
    <body>Format: Base64</body>
  </image>
  <string id="string ID" >All</string >
</resbundle>
```

Image 55: Structure description of »resbundle« in XML format

6.1.2.2.4 Transport

```
<transport timeOut="number of seconds"/>
```

Image 56: Structure description of »transport« in XML format

Attribute description:

- timeOut [unsignedInt]: (default = "60"); the longest time allowed (in seconds) between a server request and a server response.

6.1.2.2.5 Session

```
<session timeOut="number of seconds"/>
```

Image 57: Structure description of »session« in XML format

Attribute description:

- `timeOut` [unsignedInt]: (default = "1800"); the longest time allowed (in seconds) between two server requests. Otherwise the application logs out.

6.1.2.2.6 Style

Global style names:

- `PAGE` : portal
- `VIEW` : view
- `VNAV` : navigation menu
- `VTBL` : table view
- `DOC` : document
- `SEC` : document section
- `FLD` : section field

Global style:

```
<style ctx="DOC" minWidth="481" maxWidth="840" mode="PHONE">
  <item id="titleFontColor">0,0,0</item>
</style>
```

Image 58: Structure description of global »style« in XML format

Class style : (begins with character '.')

```
<style ctx=".className">
  <item id="labelFontStyle">B</item>
</style>
```

Image 59: Structure description of class »style« in XML format

Attribute description of the »style«:

- `ctx` [string]: a list of elements that the style belongs to. The values can be global or class names. More styles are separated with » . «.

Example: `ctx="DOC SEC .myStyle1 .myStyle2"`

- `minWidth` (option) [int]: minimum allowed screen width of a mobile device in pixels.
- `maxWidth` (option) [int]: maximum allowed screen width of a mobile device in pixels.
- `mode` (option): »TABLET« or »PHONE«. If not present, the style applies for both mobile device types.

Attribute description of the »item«:

- id [string]: style identifier.
- Value [string]: style value.

The validity order of the styles:

1. Styles set for a class at the service.
2. Inline in the element.
3. Styles set for a class.
4. Global style.
5. Default style.

Example of use:

```
<element class="myStyle1"/>
```

element: page, view, viewNav, viewTable, doc, sec, col, field

<https://www.google.com/design/spec/layout/responsive-ui.html#responsive-ui-breakpoints>

6.1.2.2.7 Page

Page or portal is the starting point of navigation, which leads us through the elements of the portal to subordinated views. The following elements are used for specifying:

- Page
- Group
- Page item.

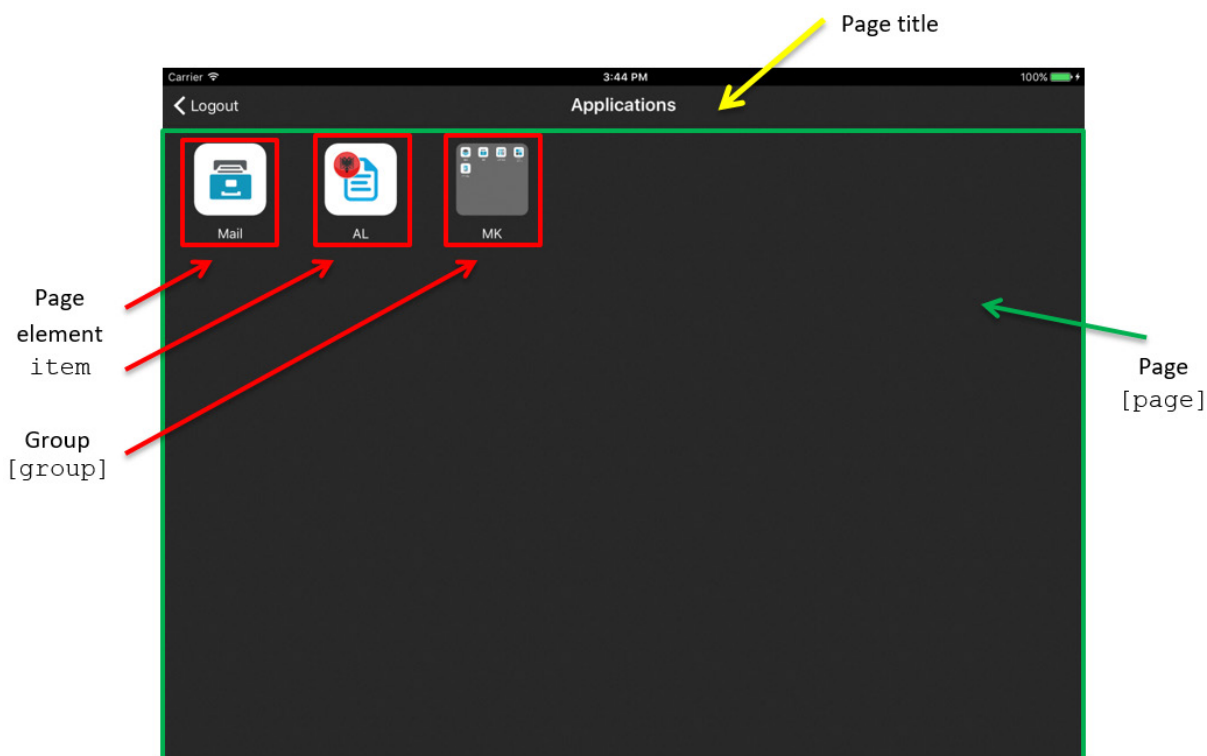


Image 60: View of »page«, »group« and »item«

```
<page id="PORTAL_RO" initial="true" titleLabel="Applications" icon="">
  <group id="GROUP_MK" caption="MK" seq="3"/>
    <item id="PORTAL_RO_mail" icon="PORTAL-MAIL" target="VIEW_RO_PELIKAN_mail" context=""
seq="1">Mail</item>
    <item id="PORTAL_AL_group" icon="PORTAL-AL" target="PORTAL_ME" context=""
seq="2">AL</item>
    <item id="PORTAL_MK_mail" icon="PORTAL-MAIL" target="VIEW_MK_PELIKAN_mail" context=""
group="GROUP_MK">Mail</item>
    <item id="PORTAL_MK_contracts" icon="PORTAL-CONTRACTS" target="VIEW_MK_POSEL_contracts"
context="" group="GROUP_MK">Contracts</item>
    <item id="PORTAL_MK_CostInvoices" icon="PORTAL-COSTINV"
target="VIEW_MK_NABAVA_CostInvoices" context="" group="GROUP_MK">Cost invoices</item>
    <item id="PORTAL_MK_tasks" icon="PORTAL-TASKS" target="VIEW_MK_NALOG tasks" context=""
group="GROUP_MK" seq="1">Tasks</item>
    <item id="PORTAL_MK_localApplication" icon="PORTAL-EANTRAG"
target="VIEW_MK_ANTRAGS_localApplication" context="" group="GROUP_MK">e-Antrag</item>
</page>
<page id="PORTAL_PFGAL" initial="false" titleLabel="Applications - AL">
  <item id="PORTAL_AL_mail" icon="PORTAL-MAIL" target="VIEW_AL_PELIKAN_mail"
context="">Mail</item>
  <item id="PORTAL_AL_contracts" icon="PORTAL-CONTRACTS" target="VIEW_AL_POSEL_contracts"
context="">Contracts</item>
  <item id="PORTAL_AL_tasks" icon="PORTAL-TASKS" target="VIEW_AL_NALOG tasks"
context="">Tasks</item>
  <item id="PORTAL_AL_localApplication" icon="PORTAL-EANTRAG"
target="VIEW_AL_ANTRAGS_localApplication" context="">e-Antrag</item>
</page>
```

Image 61: Structure description of element »page« in XML format

6.1.2.2.7.1 The »page« element

Global name: PAGE.

Attribute description of the »page« element:

- backgroundColorBottom [string: 0,0,0]: (default: 0,0,0) bottom background color.
- backgroundColorTop [string: 0,0,0]: (default: 0,0,0) top background color.
- background [string]: background image id.
- icon [string]: (default: "") image id in the upper right of the page.
- titleLabel [string]: (default: "") page title in the upper centre of the page.
- itemFontColor [string: 0,0,0]: (default: 255,255,255) font color of the element.
- titleFontColor [string: 0,0,0]: (default: 255,255,255) font color of the title
(also specifies the icon colors in the toolbar).
- titleFontSize [Int]: (default: 20) title font size in pixels.
- titleFontStyle [char]: (default: N) font style
 - N: regular
 - B: bold
 - I: italics.
- titleFontColor [string]: (default: 0,0,0) font color in RGB (e.g.: 250, 244, 23).
- titleBackgroundColorBottom [string: 0,0,0]: [default: 0,0,0] bottom color of the toolbar background.
- titleBackgroundColorTop [string: 0,0,0]: [default: 0,0,0] top color of the toolbar background.
- titleBackground [string]: identifier of the background image of the toolbar.

6.1.2.2.7.2 The »group« element

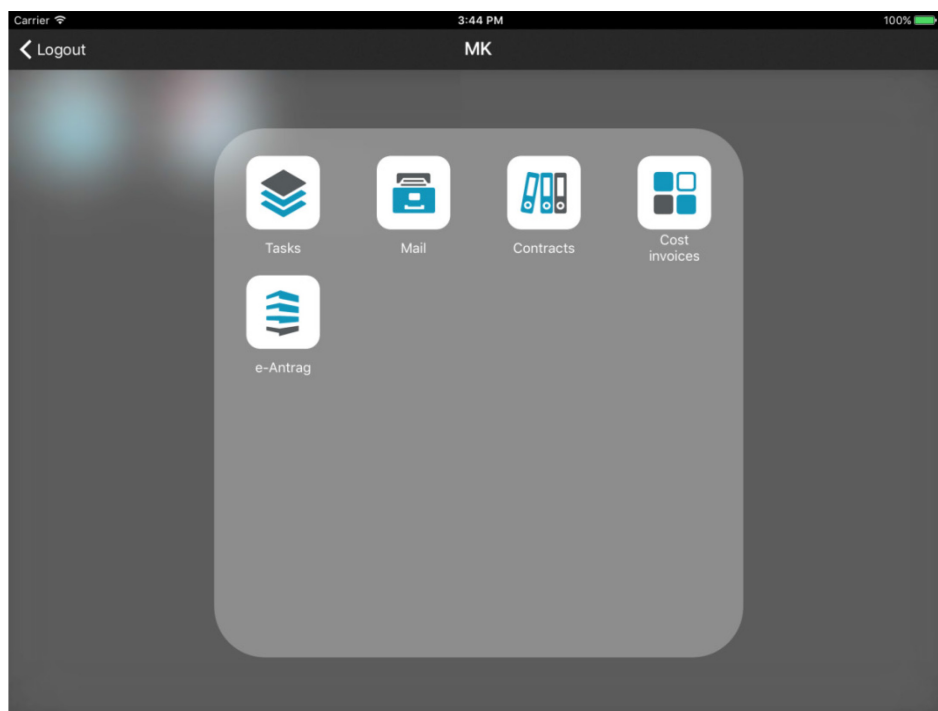


Image 62: View of »group« element

```
<page id="PORTAL_RO" initial="true" titleLabel="Applications" icon="">
  <group id="GROUP_MK" caption="MK" seq="3"/>
    <item id="PORTAL_MK_mail" icon="PORTAL-MAIL" target="VIEW_MK_PELIKAN_mail" context=""
group="GROUP_MK">Mail</item>
    <item id="PORTAL_MK_contracts" icon="PORTAL-CONTRACTS" target="VIEW_MK_POSEL_contracts"
context="" group="GROUP_MK">Contracts</item>
    <item id="PORTAL_MK_CostInvoices" icon="PORTAL-COSTINV"
target="VIEW_MK_NABAVA_CostInvoices" context="" group="GROUP_MK">Cost invoices</item>
    <item id="PORTAL_MK_tasks" icon="PORTAL-TASKS" target="VIEW_MK_NALOGUE_tasks" context=""
group="GROUP_MK" seq="1" >Tasks</item>
    <item id="PORTAL_MK_localApplication" icon="PORTAL-EANTRAG"
target="VIEW_MK_ANTRAGS_localApplication" context="" group="GROUP_MK">e-Antrag</item>
</page>
```

Image 63: Structure description of element »group« in XML format

6.1.2.2.7.3 The »item« element

»Item« element of the page. One page can contain N »item« elements.

Attribute description of the »item« element (* marks required attributes):

- id* [string]: element id.
- icon [string]: (default: "") image id that is shown in the element.

- target* [string]: id of the following page, which will be displayed upon selection. It can also be new portal.
- context [string]: (default: "") context that is sent unchanged at target data request.
- group [string]: id of the group the element belongs to.
- seq [int]: position index in the portal list. If the attribute „group“ is selected, the position index in the list belongs to the defined group.
- title of the »item« element [string]: localized string or string identifier that is displayed as the subtitle of the element (text under the »item« element).

A description of the „group“ element attributes:

- id* [string]: id of the group.
- caption* [string]: id of a localized string or string that is displayed as the subtitle of the element.
- seq [int]: position index in the portal list.

6.1.2.2.7.4 Stili elementa »Page«

Globalno ime: PAGE.

- backgroundColorBottom [string: 0,0,0] [default: 0,0,0]: bottom background color.
- backgroundColorTop [string: 0,0,0]: (default: 0,0,0) top background color.
- background [string] background image id.
- icon [string] : (default: "") image id in the upper right of the page.
- itemFontColor [string: 0,0,0] (default: 255,255,255) font color of the element.
- titleFontColor [string: 0,0,0]: (default: 255,255,255) font color of the title (also specifies the icon colors in the toolbar).
- titleFontSize [int]: (default: 20) title font size in pixels.
- titleFontStyle [char]: (default:N) font style
 - N: regular
 - B: bold
 - I: italics.
- titleFontColor [string]: (default:0,0,0) font color in RGB (e.g.: 250, 244, 23).
- titleBackgroundColorBottom [string: 0,0,0]: (default: 0,0,0) bottom color of the toolbar background.

- titleBackgroundColorTop [string: 0,0,0] [default: 0,0,0]: top color of the toolbar background.
- titleBackground [string]: identifier of the background image of the toolbar.

6.1.2.2.8 View

View consists of the following elements:

- view (basic information).
- viewNav (navigation menu).
- viewTable (content).

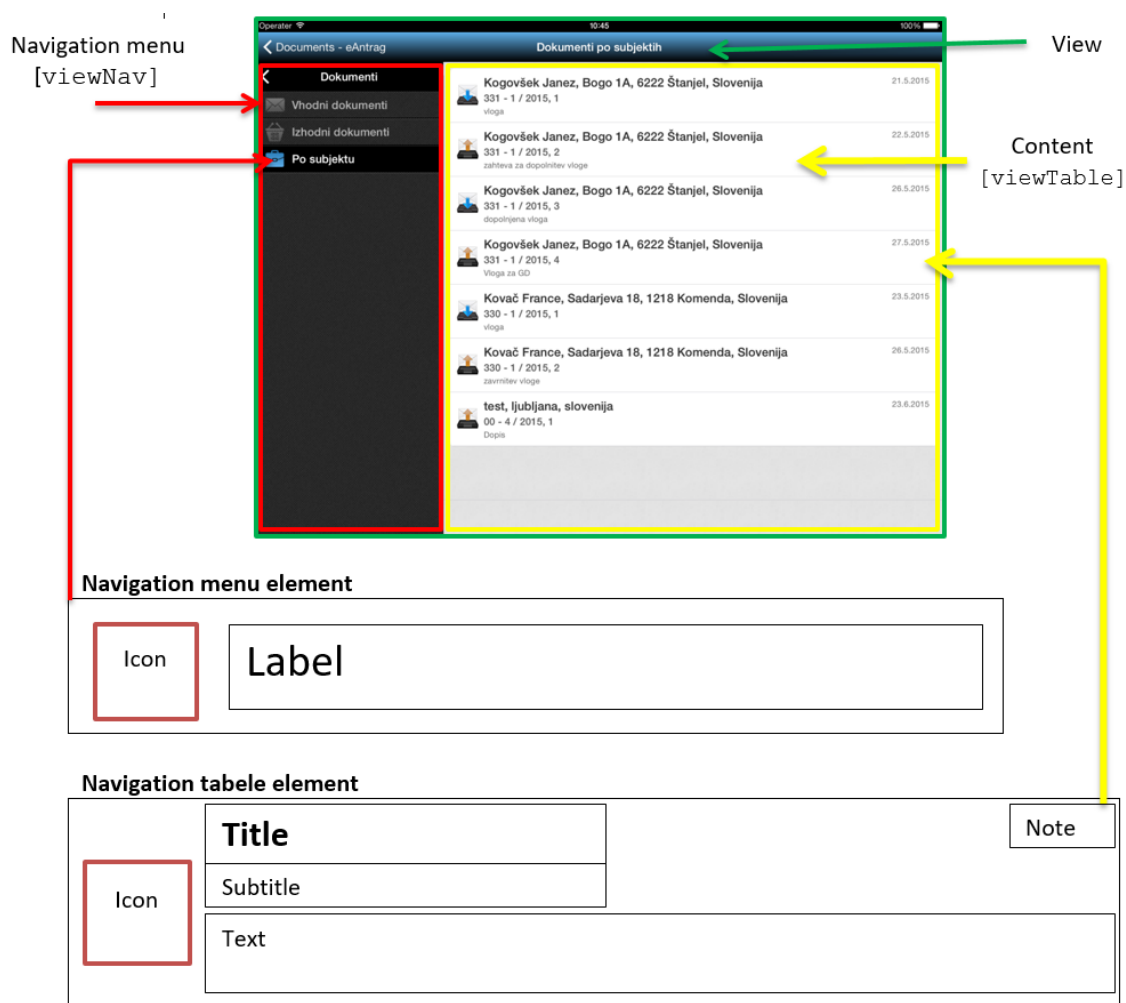


Image 64: View of »view«, »navigation menu«, »navigation table«, »content« and »content table«

6.1.2.2.8.1 The »view« element

Enables navigation through different databases of basic information on documents (document stub). It is used for menu navigation and selection of data display table. It can have several levels.

```
<view id="SingleView ID" root="true/false" initial="true/false" context="String"
navigator="navigation ID" table="table ID" class="className"/>
```

Image 65: Structure description of element »view« in XML format

Attribute description of the »view« element (* marks required attributes):

- id* [string]: element id.
- root [boolean]: (default: false) whether it is in root of navigation menu.
- initial [boolean]: (default: false) whether it is the first page after login window.
- context [string]: (default: "") context that is sent to the service unchanged in order to select appropriate data from the table (e.g.: "@Name[CN]; @UserName").
- navigator* [string]: navigation menu id.
- table [string]: content table id.
- class [string]: style class.

Note: »Navigator ID« or »table ID« are obligatory. »Navigator ID« is prioritized. If it does not exist, »table ID« and context are taken into account.

6.1.2.2.8.1.1 The »view« element style

Global name: VIEW

Attribute description of the »view« element style:

- titleFontColor [string: 0,0,0]: (default: 255,255,255) title font color (also specifies the icon colors in the toolbar).
- titleFontSize [int]: [default: 20] title font size.
- titleFontStyle [char: N/B/I]: [default: N]: title font style.
- titleBackgroundColorTop [string: 0,0,0]: (default: 0,0,0) top color of the toolbar gradient.
- titleBackgroundColorBottom [string: 0,0,0]: (default: 0,0,0) bottom color of the toolbar gradient
- titleBackground [string]: identifier of the background image of the toolbar.

6.1.2.2.8.2 The »viewNav« element

It is used for menu navigation and selection of data display table. It can have several levels.

```
<viewNav id="navigation ID" enabled="true/false" collapse="true/false" class="className">
  <item icon="icon id" caption="text" target="table Id" context="" default="true/false" />
  <item icon="" caption="item2">
    <item icon="icon id" caption="item2.1" default="true">
      <item icon="icon id" caption="item2.1.1" target="table ID" context="@Username" />
    </item>
  </item>
</viewNav>
```

Image 66: Structure description of element »viewNav« in XML format

Attribute description of the »viewNav« element (* marks required attributes):

- id* [string]: navigation menu id.
- enabled [boolean]: (default: true) possibility of influence on the menu elements
 - true: enabled menu element
 - false: disabled menu element (static, choice is not calibrated).
- class [string]: style class.

Attribute description of the navigation menu »item« element (cell) (* marks required attributes):

- icon [string]: (default: "") image id next to label.
- caption [string]: (default: "") label content.
- target* [string]: table view id that is shown when selected.
- context [string]: (default: "") context that is sent unchanged to service in order to choose contextually appropriate table data (e.g. "@Name([CN]);@UserName)").
- default [boolean]: (default: false) whether the cell represents the first selected element on the navigation menu. In case of several default="true" attributes, choose the first one.

6.1.2.2.8.2.1 The »viewNav« element style

Global name: VNAV

Attribute description of the »viewNav« element style:

- background [string]: identifier of the background image of the toolbar.
- backgroundColorBottom: (default: 0,0,0) bottom color of the toolbar gradient.
- backgroundColorTop: (default: 0,0,0) top color of the toolbar gradient.

- cellHeight: (default: 40) height of the menu item in pixels.
- collapse: (default: true) »true« navigation is hidden; otherwise visible.
Valid when minWidth = 0.
- highlighted [boolean]: (default: true) highlight selected cells.
- highlightColorTop: (default: 0,0,0) top color of the highlighted cell gradient.
- highlightColorBottom: (default: 0,0,0) bottom color of the highlighted cell gradient.
- highlightIndicator [boolean]: (default: true) show left line by the selected element.
- highlightBackground [string]: identifier of the background image.
- highlightBackgroundColorBottom [string: 0,0,0]: (default: 0,0,0) bottom color of the selected cell gradient.
- highlightBackgroundColorTop [string: 0,0,0]: (default: 0,0,0) top color of the selected cell gradient.
- iconOffsetLeft: (default: 0) left offset of the image in pixels.
- labelFontSize: (default: 20) label font size in pixels.
- labelFontStyle: (default: N) label font style.
 - N: regular
 - B: bold
 - I: italics.
- labelFontColor: (default: 255,255,255) label font color of the menu element.
- labelHighlightFontColor: (default: 255,255,255) label font color when highlighting.
- labelJust: (default: L) text position in the label
 - L: left alignment
 - C: center alignment
 - R: right alignment.
- labelLines: (default: 0) number of lines to display the text of the label element.
- labelOffsetLeft: (default: 0) left offset of the label element in pixels.
- minWidth [unsignedInt]: (default: 0) minimum navigation width.
- width [unsignedInt]: (default: system default width) menu width in pixels.

6.1.2.2.8.3 The »viewTable« element

It represents a set of »document stub« elements.

```
<viewTable id="table id" source="dataset ID" tableTitle="text" class="Class name"/>
```

Image 67: Structure description of element »viewTable« in XML format

Attribute description of the »viewTable« element (* marks required attributes):

- id* [string]: table identifier.
- source* [string]: dataset identifier as registered in service.
- tableTitle [string]: (default: "") the table title is shown in the middle of the title bar/section when the table is shown.
- class [string]: style class.

6.1.2.2.8.3.1 The »viewTable« element style

Global name: VTBL

Attribute description of the »viewTable« element style:

- marginLeft [unsignedInt]: (default: 0) left offset of the »view« table in pixels.
- marginBottom [unsignedInt]: (default: 0) bottom offset of the »view« table in pixels.
- marginRight [unsignedInt]: (default: 0) right offset of the »view« table in pixels.
- marginTop [unsignedInt]: (default: 0) top offset of the »view« table in pixels.
- cellHeight [unsignedInt]: (default: auto) cell height in pixels.
- highlighted [boolean]: (default: true) cell highlighting when selected.
- highlightedTextColor [string]: (default: true) highlighted cell text color when selected.
- dataOffsetLeft [unsignedInt]: (default: 0) left offset of cell content in pixels.
- dataOffsetRight [unsignedInt]: (default: 0) right offset of cell content in pixels.
- iconOffsetLeft [unsignedInt]: (default: 0) left offset of image in pixels.
- titleLines: (default: 0) number of lines for the title of the »document stub« in a cell.
- titleHeight [unsignedInt]: (default: auto) title height of the cell in pixels.
- titleJust [char]: (default: L) text position of cell title
 - L : left alignment
 - C: center alignment
 - R: right alignment.

- titleFontSize [unsignedInt]: (default: 20) title font size of the cell in pixels.
- titleFontStyle [char]: (default: N) title font style
 - N: regular
 - B: bold
 - I: italics.
- titleFontColor [string]: (default: 0,0,0) font color in RGB (e.g. 250, 244, 23).
- subTitleLines [unsignedInt]: (default: 0) number of lines for the subtitle of the »document stub« in a cell.
- subTitleFontColor [string]: (default: 0,0,0) font color in RGB (e.g. 250, 244, 23).
- subTitleFontSize [unsignedInt]: (default: 20) subtitle font size in pixels.
- subTitleFontStyle [char]: (default: N) subtitle font style
 - N: regular
 - B: bold
 - I: italics.
- subTitleHeight: (default: auto) subtitle height in a cell in pixels.
- subTitleJust [char]: (default: L) text position in a cell subtitle
 - L: left alignment
 - C: center alignment
 - R: right alignment.
- noteWidth [string]: (default: 0) »document stub« label width
 - pt (e.g. "20"): fixed offset in pixels
 - % (e.g. "15%"): offset in the percentage of cell width.
- noteLines [unsignedInt]: (default: 0) number of lines for the »document stub« label text.
- noteHeight [unsignedInt]: (default: auto) label height of the cell in pixels.
- noteJust [char]: (default: L) text position of a label in a cell
 - L: left alignment
 - C: center alignment
 - R: right alignment.
- noteFontSize [unsignedInt]: (default: 20) label font size in a cell in pixels.
- noteFontStyle [char]: (default: N) label font style
 - N: regular
 - B: bold
 - I: italics.

- **noteFontColor** [string]: (default: 0,0,0) label font color in RGB (e.g. 250, 244, 23).
- **textLines** [unsignedInt]: (default: 0) number of lines for the »document stub« context text in a cell.
- **textHeight** [unsignedInt]: content area height in a cell in pixels.
- **textJust** [char]: (default: L) text position in a cell
 - L (default): left alignment
 - C : center alignment
 - R : right alignment.
- **textFontSize** [unsignedInt]: (default: 20) content font size in a cell in pixels.
- **textFontStyle** [char]: (default: N) content font style
 - N (default): regular
 - B : bold
 - I : italics.
- **textFontColor** [string]: (default: 0,0,0) Content font color in RGB (e.g.: 250, 244, 23).

6.1.2.2.9 Document

The document shows content in detail, where the content is divided into sections.

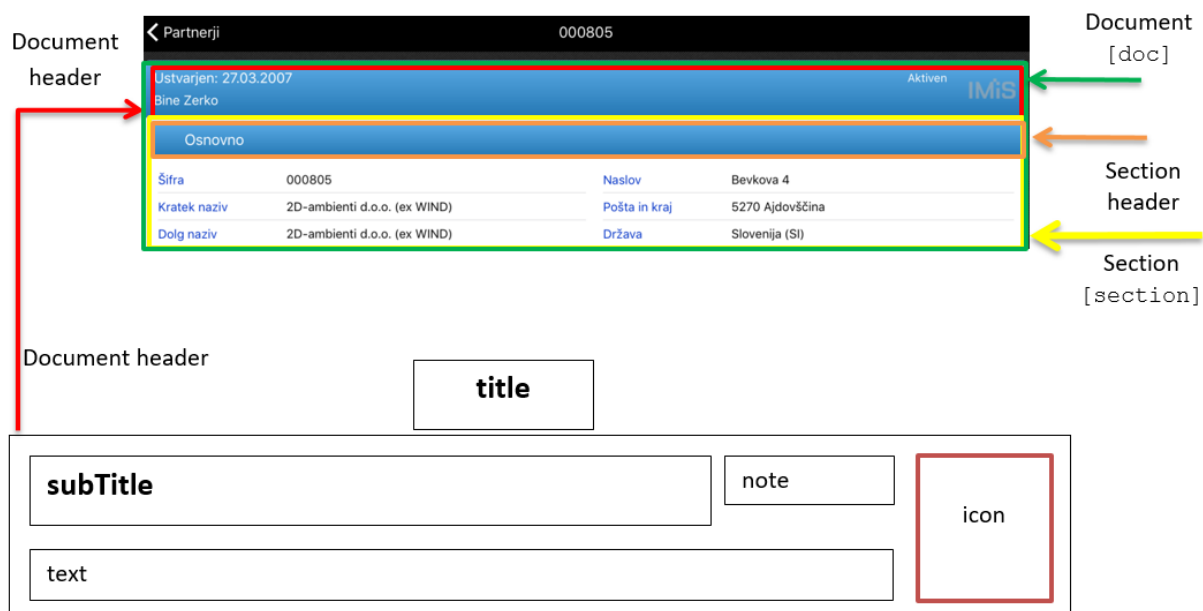


Image 68: View of document with content

```
<section id="section Id" type="T/W" class="className"/>
</section>
```

Image 69: Structure description of »section« in XML format

6.1.2.2.9.1 The »doc« section

Attribute description of the »doc« section (* marks required attributes):

- id* [string]: document identifier.
- titleField* [string]: field identifier of document title.
- subTitleField [string]: (optional: not displayed if not specified) unique »created« field identifier (time of creation of the document).
- noteField [string]: (optional: not displayed if not specified) unique »status« field identifier (current document status).
- textField [string]: (optional: not displayed if not specified) unique »text« field identifier.
- class [string]: style class.

6.1.2.2.9.1.1 The »doc« element style

Global name: DOC

Attribute description of the »doc« element style:

- borderOffset [unsignedInt]: (default: 0) border offset in pixels.
- subTitleHeight [unsignedInt]: (default: auto) height in a field »subTitle« in pixels.
- subTitleJust [chair]: (default: L) text position in a field »subTitle«
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- subTitleFontSize [unsignedInt]: (default: 20) font size in a field »subTitle« in pixels.
- subTitleFontStyle [chair]: (default: N) font style in a field »subTitle«
 - N : regular
 - B : bold
 - I: italics.
- subTitleFontColor [string]: (default: 255,255,255) font color in a field »subtitle«.
- headerBackground [string]: background image identifier.

- headerBackgroundColorTop [string]: (default: 0,0,0) top gradient color of document header.
- headerBackgroundColorBottom [string]: (default: 0,0,0) bottom gradient color of document header.
- headerHeight [unsignedInt]: (default: auto) document header height in pixels.
- headerMargin [unsignedInt]: (default: 2) »subTitle«, »note«, »icon« and »text« offset.
- headerPadding [unsignedInt]: (default: 2) internal offset of the header field.
- icon [string]: unique »icon« field identifier (document logo).
- sectionsOffset [unsignedInt]: (default: 0) spacing between sections in pixels.
- noteHeight [unsignedInt]: (default: auto) height of the »note« field in pixels.
- noteJust [char]: (default: L) text position in the »note« field
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- noteFontSize [unsignedInt]: (default: 20): font size in the »note« field.
- noteFontStyle [char] (default: N) font style in the »note« field
 - N : regular
 - B : bold
 - I: italics.
- noteFontColor [string]: (default: 255,255,255) font color.
- noteLines [unsignedInt]: (default: auto) number of lines in the »note« field.
- noteWidth [unsignedInt]: (default: auto) width of the »note« field.
- titleFontSize [unsignedInt]: (default: 20) font size of the document's title in pixels.
- titleFontStyle [char]: (default: N) font style of the document's title
 - N : regular
 - B : bold
 - I: italics.
- titleFontColor [string]: (default: 255,255,255) font color of the document's title (also specifies the icon colors in the toolbar).
- titleBackground [string]: identifier of the background image of the toolbar.
- titleBackgroundColorBottom [string: 0,0,0]: bottom color of the toolbar gradient.
- titleBackgroundColorTop [string: 0,0,0]: top color of the toolbar gradient.

- textHeight [unsignedInt]: (default: auto) height of the »text« field in pixels.
- textJust [char]: (default: L) text position in the »text« field
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- textFontSize [unsignedInt]: (default: 20) font size in the »text« field.
- textFontStyle [char]: (default: N) font style in the »text« field
 - N : regular
 - B : bold
 - I: italics.
- textFontColor [string]: (default: 255,255,255) font color in the »text« field.
- textLines [unsignedInt]: (default: auto) number of lines in the »text« field.

6.1.2.2.9.2 The »section« element [config / doc / section]

Attribute description of the »section« element (* marks required attributes):

- id* [string]: section identifier.
- title [string]: (default) section title.
- class [string]: style class.

6.1.2.2.9.2.1 The »section« element style

Global name: SEC

Attribute description of the »section« element style:

- visible [boolean]: (default: true) is the section visible; this element is used in connection with classes.
- headerBackground [string]: identifier of the background image of the section header.
- headerBackgroundColorTop [string]: (default: 0,0,0) top color of the section header gradient.
- headerBackgroundColorBottom [string]: (default: 0,0,0) bottom color of the section header gradient.
- headerHeight [unsignedInt]: (default: 40) section header height. For sections without headers, the value of the attribute is 0.

- height [unsignedInt]: (default: 200) section height. For »wrappers«, this value is used for the height of the »wrapper«.
- state [char]: (default: F) initial section status
 - C - collapse: closed section, possible to expand/close
 - E - expanded: open section, possible to expand/close
 - F - fix: open section, not possible to expand/close
 - S - standalone: standalone section, section opens on a new page, only the header is visible, there is an arrow on the right side of the header.
- titleJust [char]: (default: L) text position in the title of the section.
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- titleFontSize [unsignedInt]: (default: 20) font size in the title of the section.
- titleFontStyle [char]: [default: N] font style in the title of the section
 - N : regular
 - B : bold
 - I: italics.
- titleFontColor: (default: 255,255,255) font color in the title of the section (also specifies the icon colors in the section header).

6.1.2.2.10 Section [config / section]

Represents the structure of individual sections in a document. A section is divided into columns with tables.

Lead			
Name / Surname	Mr. Thomas Grönvik	Position	CEO
Company	Fortunat AB	Address	Brunnsgatan 89
Zip / City	SE-824 26 Hudiksvall	Country	Sweden
E-mail	thomas.gronvik@fortunat.se	Web address	http://www.fortunat.se
No. of employees	35	Comment	

Image 70: View of section in the document

```
<section id="section Id" type="T/W" class="className"/>
</section>
```

Image 71: Structure description for specifying individual sections in XML format

Attribute description (* marks required attributes):

- id* [string]: section identifier If the string is empty, this is a subtitle of the section.
- type* [char]: section type (mandatory when »id« is not an empty string)
 - T – table : section that consists of tables
 - W – wrapper : section that includes form.
- class [string]: style class.

Table is valid in section type »T«.

```
<col>
  <field id="field1 id" type="B/C/D/T/DT/DBL/INT/RT/S" label="text" />
  <field id="" type="S" label="Section subtitle" />
  <field id="field2 id" type="D" label="Entry date" />
</col>
```

Wrapper is valid in section type »W«.

```
<col>
  <wrapper id="wrapper Id" target="navigation id/id" />
</col>
```

Attribute description (* marks required attributes):

- id* [string]: wrapper id
- target* [string]: identifier of a contained form.

6.1.2.2.10.1 The »section« element

If shares are used, it is advisable that the sum of all shares (columnOffset, labelWidth, valueWidth) is equal to 100%.

The validity order of the section styles in a document:

1. Inline [config/doc/section]
2. Class [config/doc/section]
3. Class [config/section]
4. Global Section
5. Hardcoded.

6.1.2.2.10.1.1 The »section« element style

Attribute description (* marks required attributes):

- contentOffset (Section Type="T") [unsignedInt/string]: (default: 0) top, bottom, left and right offset of content from section margins
 - pt (e.g. "20"): fixed offset in pixels
 - % (e.g. "15%"): offset in percentage of section width.
- columnOffset (sectionType="T") [unsignedInt/string]: (default: 0) column offset in section
 - pt (e.g. "20"): fixed offset in pixels
 - % (e.g. "15%"): offset in percentage of content area width.
- rowOffset (sectionType="T") [unsignedInt/string]: (default: 7) offset of cells in a table (top and bottom margins)
 - pt (e.g. "20") (default: 7): fixed offset in pixels.

6.1.2.2.10.2 The »col« element [config/section/col]

The validity order of the section styles in a document:

1. Inline [config/doc/section]
2. Class [config/doc/section]
3. Hardcoded.

6.1.2.2.10.2.1 The »col« element style

Attribute description (* marks required attributes):

- valueWidth [unsignedInt/string]: (default: 50%) value width in section
 - pt (e.g. "20"): fixed offset in pixels
 - % (e.g. "15%"): offset in percentage of section width.
- labelWidth [unsignedInt/string]: (default: 50%) label width in section:
 - pt (e.g. "20"): fixed width in pixels
 - % (e.g. "15%"): width in percentage of content area width.
- width [unsignedInt/string]: (optional) specifies column width; »valueWidth« and »labelWidth« depends on the new parameter if it is present.

6.1.2.2.10.3 The »field« element [config/section/field]

Valid for sectionType "T". Represents a field in a section table (which is multivalued).

```
<field id="field1 id" type="B/C/D/T/DT/DBL/INT/RT/S" label="text" orientation="H/V"
class="className" />
```

Image 72: Structure description of element »field« in XML format

Attribute description (* marks required attributes):

- id* [string]: unique field identifier.
- type* [string]: type of field value
 - B – boolean (e.g.: T/F)
 - C – currency: currency in ISO currency format (e.g. CurrencyCode = "EUR")
 - D – date (e.g. 2017-01-26)
 - T – time (e.g. 11:31:04)
 - DT – date time (e.g. 2017-01-26T09:31:20+02:00)
 - DBL – double (e.g. 3.43E+2)
 - INT – integer (e.g. 56)
 - RT - rich Text (only a fixed size text view where we navigate is supported)
 - S – string
 - IMG – image (image with image ID from configuration).
- label [string]: (default: "") field label (it can be defined through »Datasource« section with the » displayName « attribute).
- orientation* [char]: field orientation
 - H – horizontal: the positions of label and value are in the same line
 - column width = labelWidth + valueWidth
 - V – vertical: the positions of label and value are in separate lines
 - column width = Max (labelWidth, valueWidth).
- class [string]: style class.

The validity order of the »field« element styles:

1. Inline [config/section/col/field]
2. Class [config/section/col/field]
3. Global Field
4. Inline [config/doc/section]

5. Class [config/doc/section]
6. Global Section
7. Hardcoded.

6.1.2.2.10.3.1 The »field« element style

Global name: FLD

Attribute description (* marks required attributes):

- labelJust [char]: (default: L) label text position
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- labelFontSize [unsignedInt]: (default: 15) label font size.
- labelFontStyle [char]: (default: N) label font style
 - N : normal
 - B : bold
 - I : italic.
- labelFontColor [string]: (default: 0,0,0) label font color.
- orientation [char: H/V]: (default: H) field orientation
 - H – horizontal: label position and value are in the same row
 - column width = »LabelWidth« + »ValueWidth«
 - V – vertical: label position and value are in a separate row
 - column width = »Max(LabelWidth«, »ValueWidth«).
- valueJust [char: L/C/R]: (default: L) value text position
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- valueFontSize [unsignedInt]: (default: 15) value font size.
- valueFontStyle [char]: (default: N) value font style
 - N : normal
 - B : bold
 - I : italic;
- valueFontColor [string]: (default: 0,0,0) value font color.

6.2 »DATABASES«

In the section »Databases«, the user defines database location.

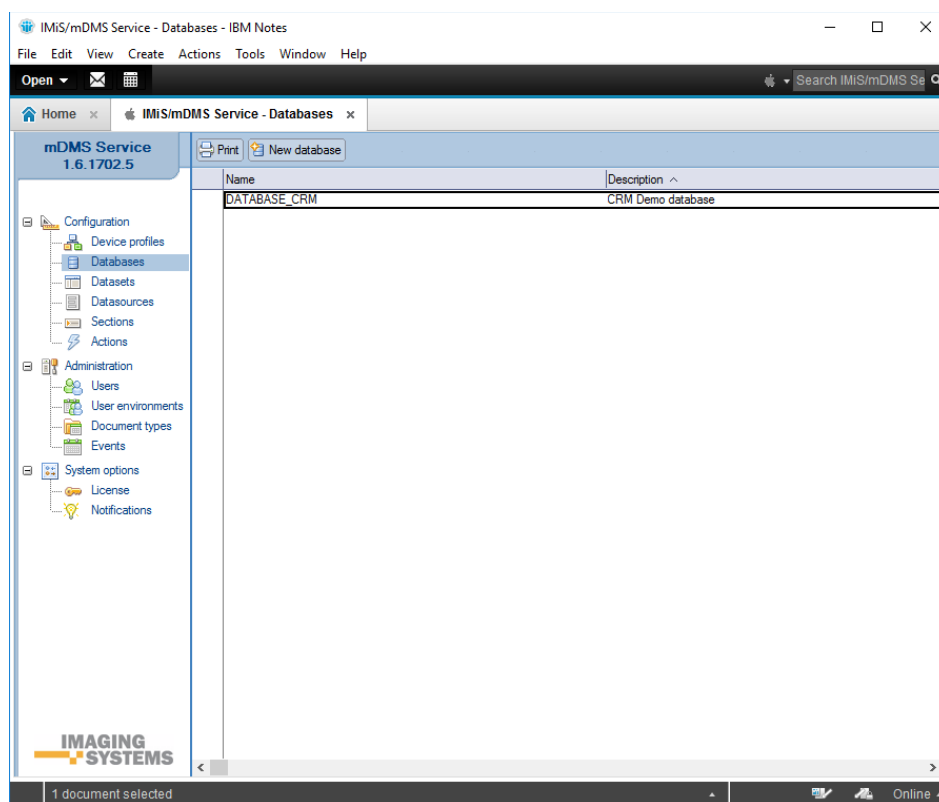


Image 73: View of the »Databases« section

The fields in the document are divided into following sections:

- Basic information
- Source.

6.2.1 Basic information

In the »Basic information« header, the user defines the name and description of the database.

Basic information	
Name:	DATABASE_CRM
Description:	CRM Demo database

Image 74: View of settings in the »Basic information« header

[Name] Database name. Data is required.

[Description] Short database description. Data is required.

6.2.2 Source

In the »Source« header, the user defines the database location and database id.

Source	
Database:	IMiSDev/IMiS dev\imis\mdmscrm.nsf
Replica ID:	C1257EFF003C002E

Image 75: View of settings in the »Source« header

[Database] Link to the database. Data is required.

[Replica ID] Database identifier. Data is required.

Note: When entering manually, the user must pay attention to the correct format.

6.3 »DATASETS«

In the »Datasets« section, the user defines the configurations that specify document sets.

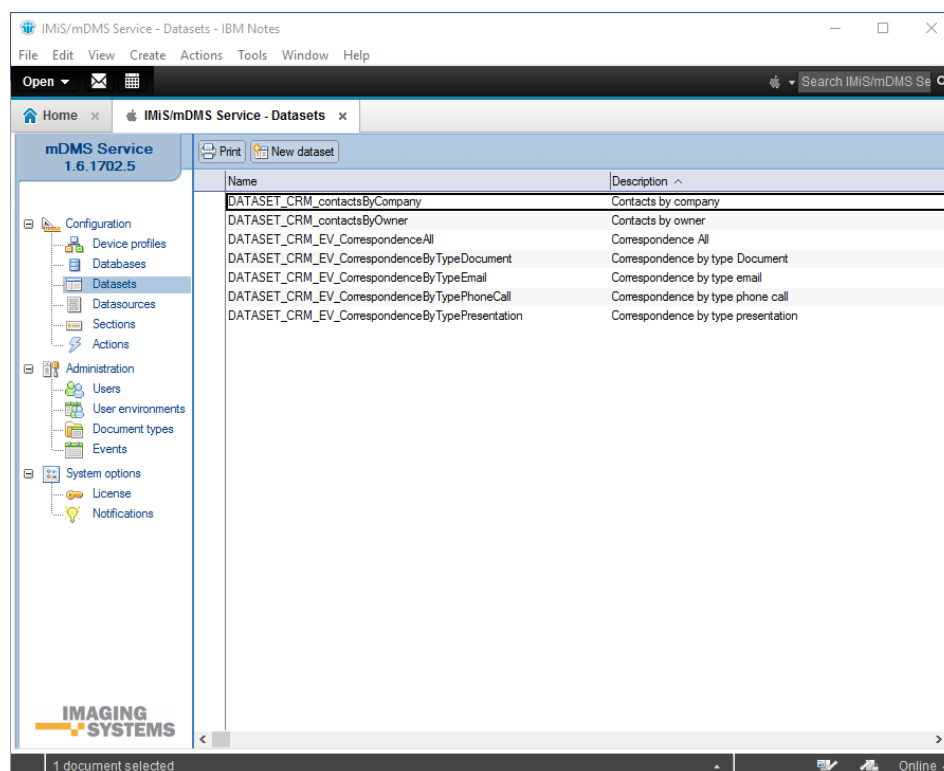


Image 76: View of the »Datasets« section

Document fields are divided into the following sets:

- Basic information.
- Source.
- Datasource.
- Source options.
- Data.
- Sections.

6.3.1 Basic information

In the »Basic information« header, the user defines a name for a document set and profiles for the current document selection.

Basic information			
Name:	DATASET_CRM_contactsByCompany	Description:	Contacts by company
Assigned device profiles:	Tablets on iOS 7.* x & 8.* & 9.* - 1/0 Configuration - 2/0		

Image 77: View of settings in the »Basic information« header

[Name] Name of a document set. Data is required.

[Assigned device profiles] Assigned profiles of mobile devices. More than one can be selected.
Data is not required.

[Description] Description of a document set. Data is not required.

6.3.2 Source

In the »Source« header, the user defines the source of a document set.

Source			
Source type:	View	Max collection size	100
Database:	DATABASE_CRM	View name:	ContactsByCompany

Image 78: View of settings in »Source« header

[Source type] Source type of a document set. The options available: »View«, »Database search«, »Custom« and »Aggregated dataset«.

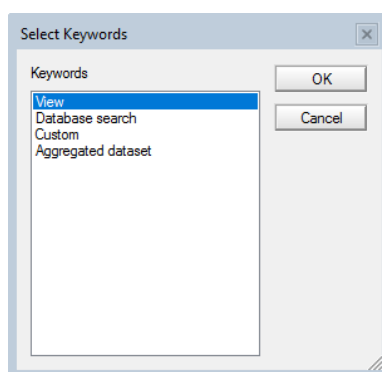


Image 79: View of dataset source type settings the »Source« header

Uporabnik lahko izbira med naslednjimi viri:

- The »**View**« option when an index of selected documents available.
Efficiency-wise, this option is the best as there is no need for document search.
The IMiS®/mDMS Service uses the existing index.
- »**Database search**« when an index is not available or if there is some other dynamic condition. (e.g., using the »@Today« function). Just as with the »**View**« option, the user is limited to documents from one database. Efficiency-wise, this option is disputable if a set contains a high number of documents.
- The »**Custom**« option allows the developer to implement his/her own logic for document search. The main advantage of this option is that documents can be stored in various databases. Efficiency-wise, this option depends on how it is implemented.
- The »**Aggregated dataset**« when he wants to combine data from multiple sources in a single document selection. This is usually to display documents from different collections in the IBM Notes environment, which otherwise is not possible.

The possibilities of setting up the source of document selection, which differs by type, are described below.

6.3.2.1 »View«

Source	
Source type:	View ▾
Database:	DATABASE_CRM ▾
Max collection size	100 ▾
View name:	(embedCorrespondenceAll) ▾

Image 80: View of settings in the »Source« header for »View« source type

6.3.2.2 Database search

Source	
Source type:	Database search ▾
Database:	DATABASE_CRM ▾
Max collection size	100 ▾
Selection:	<@> ▾

Image 81: View of settings in the »Source« header for »Database search« source type

6.3.2.3 Custom

Source	
Source type:	Custom ▾
Max collection size	100 ▾

Image 82: View of settings in the »Source« header for »Custom« source type

6.3.2.4 Aggregated dataset

Source	
Source type:	Aggregated dataset ▾
Dataset names:	DATASET_CRM_contactsByCompany DATASET_CRM_EV_CorrespondenceAll DATASET_CRM_EV_CorrespondenceByTypeEmail ▾
Max collection size	100 ▾

Image 83: View of settings in the »Source« header for »Aggregated dataset« source type

Select Keywords

Keywords

- ☒ DATASET_CRM_contactsByCompany
- ☐ DATASET_CRM_contactsByOwner
- ☒ DATASET_CRM_EV_CorrespondenceAll
- ☐ DATASET_CRM_EV_CorrespondenceByTypeDocument
- ☒ DATASET_CRM_EV_CorrespondenceByTypeEmail
- ☐ DATASET_CRM_EV_CorrespondenceByTypePhoneCall
- ☐ DATASET_CRM_EV_CorrespondenceByTypePresentation

OK Cancel

Image 84: View of settings in the »Source« header for »Dataset names« field

[Database] Database that represents the source of a document set. It is available only in the »View« or »Database search« types of document source. Data is required.

[Max collection size] The highest number of documents in a set. For efficiency reasons, the number should not be more than 5000. Data is required.

[View name] Name of index that represents the source of document set. It is available, if the document source type is »View«. Data is required.

[[Selection <@>](#)] Selection formula that represents the source of a document set. It is available if the document source type is »[Database search](#)«. Data is required.

[[Dataset names](#)] Names that represent a document set. It is available if the document source type is »[Aggregated dataset](#)«. Data is required.

6.3.3 Execute

An additional »[Execute](#)« section is opened for the user if he selects »[Custom](#)« as a source of document set. In this section, he specifies the database where the agent and his name will be executed.



Execute	
Database:	DATABASE_CRM
Agent name:	

Image 85: View of settings in the »Execute« header

[[Database](#)] A database, where the agen is executed. It is available, if the document source type is »[Custom](#)«. Data is required.

[[Agent name](#)] The name of the agent that the user executed in the database. It is available for the »[Custom](#)« document source. Data is required.

6.3.4 Search options

In the »[Search options](#)« header, the user defines search options.



Search options	
Allow search types:	<input checked="" type="checkbox"/> Full text search <input type="checkbox"/> Result set search
Relevance score:	<input type="checkbox"/> Show relevance

Image 86: View of settings in the »Search options« header

[[Allow search types](#)] Search types. »Full text search« and »Result set search« options are available. The user selects the settings option »[Full text search](#)« when he wants to search the full text. The user enters the search condition on a mobile device.

***Note:** For greater efficiency, it is recommendable to already have a built index when searching the full text.*

The user selects the option »**Result set search**« when he wants to allow the search by query results directly on a mobile device. Data is not required.

[**Relevance score**] Hit frequency display. The option »**Show relevance**« is available when a user wants to display hit frequency in a graphical form. It is relevant only when a document was found with full text search. Data is not required.

6.3.5 Data

In the »**Data**« header user defines document data in the document set view on a mobile device.

A document record consists of: title, subtitle, content, note, and icon.

Data	
Title: <@>	company
Subtitle: <@>	country
Content: <@>	"Rating: " + rating + ", Status: " + status
Note: <@>	@Text (dealValue; "F,2") + " " + currency
Icon: <@>	@If(rating = "Qualified" ; "VIEWICO-GREEN-ARROW-RIGHT" ; "")

Image 87: View of settings in the »Data« header

[**Title** <@>] Formula for title specification. Data is required.

[**Subtitle** <@>] Formula for subtitle specification. Data is required.

[**Content** <@>] Formula for content specification. Data is required.

[**Note** <@>] Formula for note specification. Data is required.

[**Icon** <@>] Formula for icon specification. It should be calculated on the name of an existing icon specified in a »**Configuration**« document. If an icon does not come into consideration, string remains blank. Data is required.

6.3.6 Sections

In the »Sections« header, the user selects sections connected to a document set.

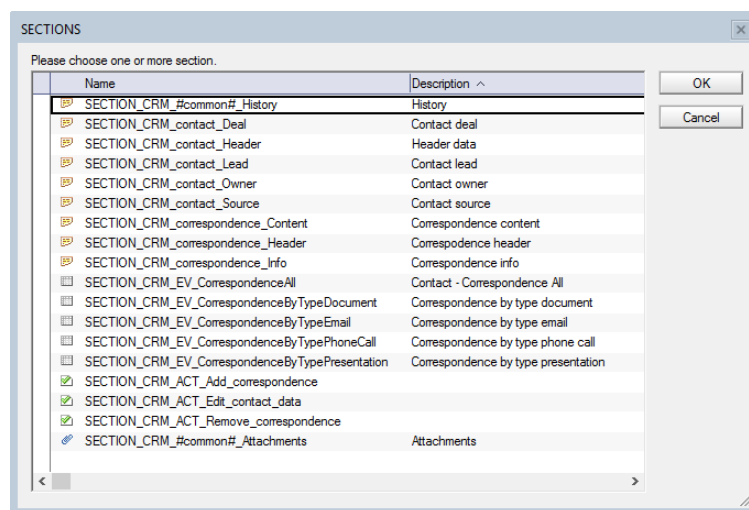


Image 88: Adding sections in the »Sections« header



Image 89: View of settings in the »Sections« header

Actions available: »Add« and »Remove«. Only section types »Actions« and »Dynamic actions« apply.

6.3.7 Logic implementation for document search

If the user chooses »Custom« as a document set source type, he needs to take care of logic implementation for returning the document set.

In the »Execute« header, the user first specifies a database and agent that is contacted in such case.

IMiS®/mDMS Service calls the agent and forwards a context document with the following fields:

[sourceName] Name of document set source.

[sourceDbContext] Context for document set extraction if available.

It is calculated based on the **[Get collection database context <@>]** field content in a »Dataset« document. The content of the field converts to a string if necessary.

If the calculation results are multivalued, only the first value applies.

[sourceContext] Context for the section if available.

It is calculated based on the **[Context <@>]** field content in a »Section« document.

Content of the field converts to a string if necessary. If the evaluation results are multivalued, only the first value applies.

[sourceFilter] Filter for full-text search if available. It should present a valid condition for full-text search. The user enters it on a mobile device.

IMiS®/mDMS Service as result of a call expects the agent to present document set data in fields **[docInfo1]**, **[docInfo2]**, ... **[docInfo<N>]**.

Each field can have any number of records in the following format:

<Database server>#<Database file path>#<Document NoteID>#<Document full-text search score>.

[Database server] Server where the document is stored. Data is required.

[Database file path] Path and name of the database where the document is stored.

Data is required.

[Document NoteID] Document NoteID. Data is required.

[Document full-text search score] Result frequency as returned by

NotesDocument.FTSearchScore. Data is optional and available to the user, in case the condition for full-document search is set.

6.4 Datasources

In the »**Datasources**« section, the user defines the configurations that specify document content.

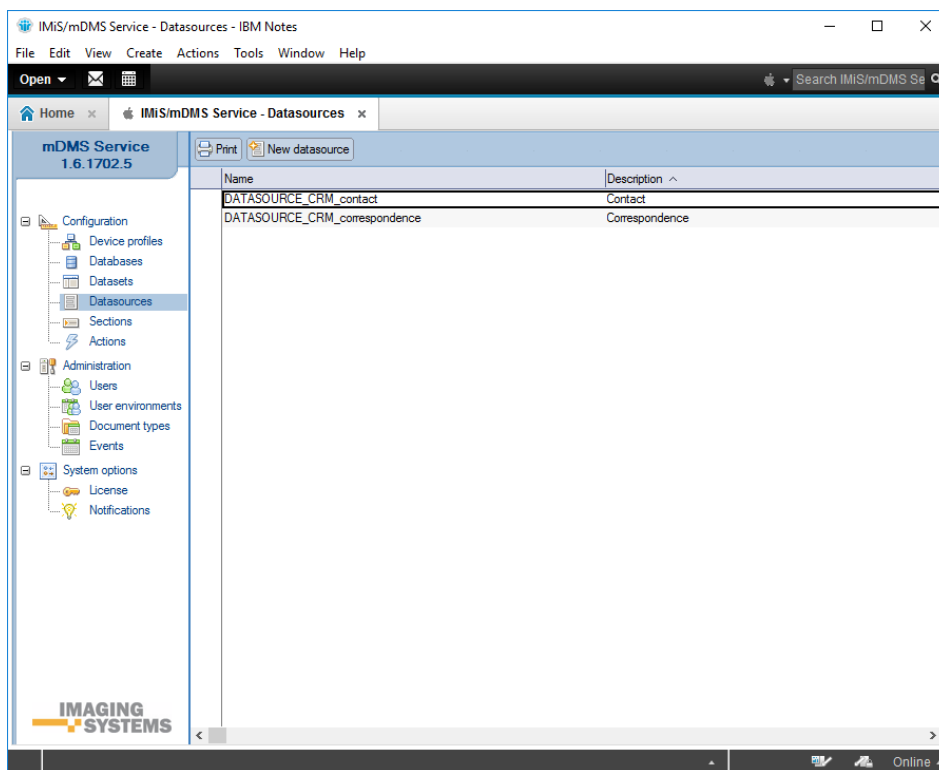


Image 90: View of the »**Datasources**« section

Document fields are divided into the following headers:

- Basic information.
- Source.
- Selection.
- Sections.

6.4.1 Basic information

The »**Basic information**« header specifies a name of document content and connects to a configuration.

Basic information			
Name:	DATASOURCE_CRM_contact	Description:	Contact
Assigned device profiles:	Tablets on iOS 7.* x & 8.* & 9.* - 1/0 Configuration - 2/0		

Image 91: View of settings in the »**Basic information**« header

[Name] Name of document content. Data is required.

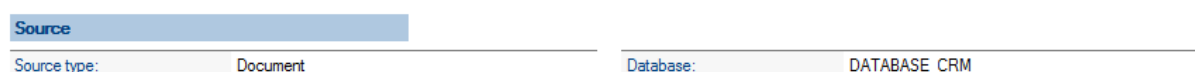
[Assigned configurations] Assigned configurations. All configurations are available.

More than one can be chosen. Data is not required.

[Description] Description of document content. Data is not required.

6.4.2 Source

In the »Source« header, the user defines the source of document content.



Source	
Source type:	Document
Database:	DATABASE_CRM

Image 92: View of settings in the »Source« header

[Source type] The source of document content. The user chooses between »Document« and »Custom« options. He selects »Custom« when he wants to obtain data using special application logic and not service database settings.

[Database] A database that represents the source of document content. Data is required.

6.4.3 Execute

An additional »Execute« section is opened for the user if he selects »Custom« as a source of document set. In this section, he specifies the database where the agent and his name will be executed.



Execute	
Database:	DATABASE_CRM
Agent name:	

Image 93: View of settings in the »Execute« header

[Database] A database, where the agent id executed. It is available, if the document source type is »Custom«. Data is required.

[Agent name] The name of the agent that is executed in the database. It is available, if the document source type is »Custom«. Data is required.

6.4.4 Selection

In the »Source« header, the user defines the selection formula, when the document opens with the given document definition.

Selection	
Definition: <@>	Form = "Correspondence"

Image 94: View of settings in the »Selection« header

[Definition <@>] Selection formula. Data is required.

6.4.5 Sections

In the »Sections« header, the user selects sections connected to document content.

Actions available: »Add« (add section) and »Remove« (remove section).

Sections of all types are applicable.














Sections	
<input type="button" value="Add"/>	<input type="button" value="Remove"/>
Name	Description
 SECTION_CRM_#common#_History	History
 SECTION_CRM_contact_Deal	Contact deal
 SECTION_CRM_contact_Header	Header data
 SECTION_CRM_contact_Lead	Contact lead
 SECTION_CRM_contact_Owner	Contact owner
 SECTION_CRM_contact_Source	Contact source
 SECTION_CRM_EV_CorrespondenceAll	Contact - Correspondence All
 SECTION_CRM_EV_CorrespondenceByTypeDocument	Correspondence by type document
 SECTION_CRM_EV_CorrespondenceByTypeEmail	Correspondence by type email
 SECTION_CRM_EV_CorrespondenceByTypePhoneCall	Correspondence by type phone call
 SECTION_CRM_EV_CorrespondenceByTypePresentation	Correspondence by type presentation
 SECTION_CRM_ACT_Add_correspondence	
 SECTION_CRM_ACT_Edit_contact_data	

Image 95: View of settings in the »Sections« header

6.5 Sections

In the »Sections« section, the user defines configurations that specify sections intended for multiple use.

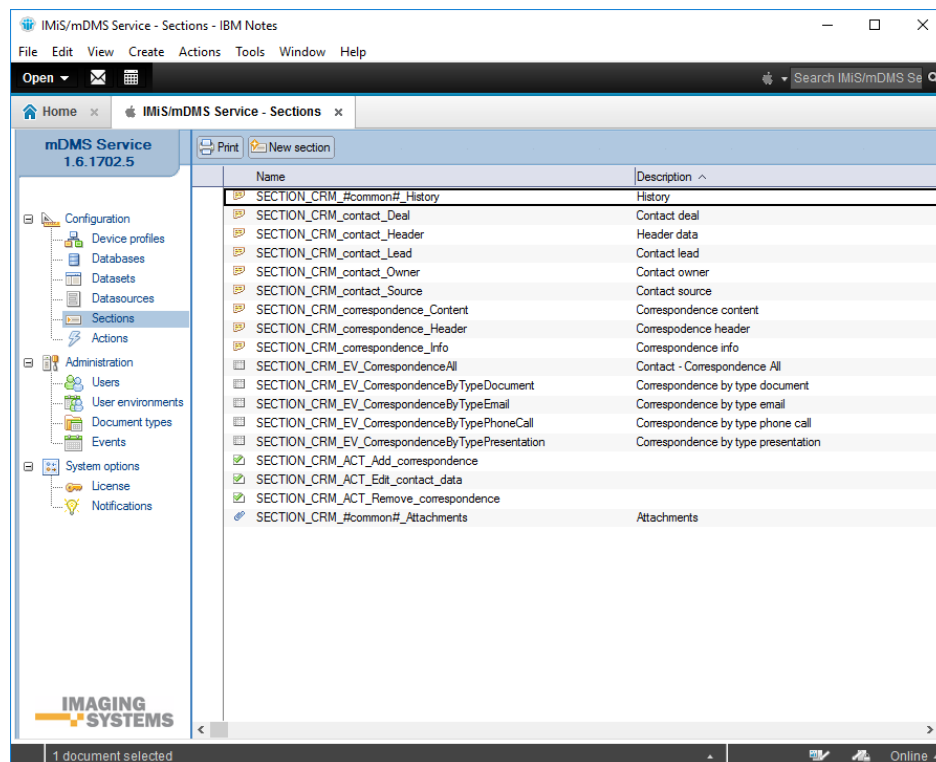


Image 96: View of the »Sections« section

Document fields are divided into the following headers:

- Basic information.
- Display.
- Data.
- Dataset.
- General.
- Actions.
- Interface agents.
- Content.

6.5.1 Basic information

In the »Basic information« header, the user specifies a name and type of section.

Basic information	
Name:	SECTION_CRM_#common#_History
Description:	History
Data type:	Data

Image 97: View of settings in the »Basic information« header

[Name] Name of the section. Data is required.

[Data type] Type of section.

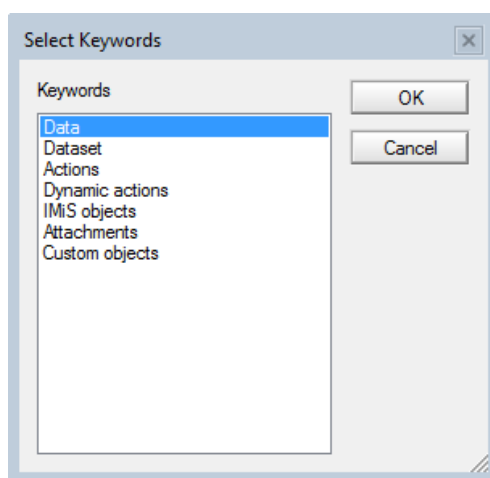


Image 98: View of settings of the »Data type« field in the »Basic information« header

The user can choose the following options:

- »Data« is intended for document data display.
- »Dataset« is intended for document set display, which is usually linked to the document context.
- »Actions« is used for display of predefined action sets.
- »Dynamic actions« is used for display of actions sets within the document and is specified dynamically based on the context of a document.
- »IMiS objects« is intended for display of IMiS® objects on a document.
- »Attachments« is intended for display of document attachments.
- »Custom objects« enables the display of any objects of the applicative nature (files) that are not IMiS® objects or attachments.

[Description] Description of section. Data is not required.

6.5.2 Display

In the »Display« header, the user defines condition under which the section will be displayed.

Display	
Condition: <@>	Class: <@>

Image 99: View of settings in the »Display« header

[Condition @] A formula that determines the condition under which the field is visible. Data is not required.

[Class <@>] A formula to determine the class display. Data is not required.

6.5.3 Data

In the »Data« header, the user specifies a set of display fields if »Data« as a type of section is selected.

Data						
No	Field name	Type	Display name <@>	Condition <@>	Class <@>	Value <@>
1.	History	String				@Text(revisionTime;"D0T0") + " - " + @Name([Abbreviate];revisionAuthor)

Image 100: View of settings in the »Data«, »Currency options« and »Keywords options« headers

For each field, the user specifies:

[Field name] Field name. Data is required.

[Field type] Field type. Data is required.

The following options are available to the user:

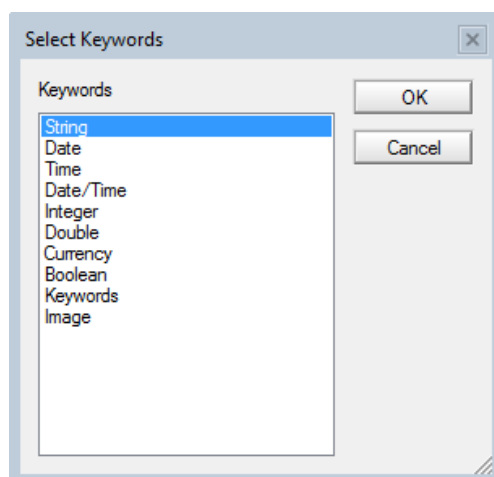


Image 101: View of settings of the field »Type

[Display name <@>] Displayed name of field. Data is not required.

[Condition <@>] The condition under which the field is visible. Data is not required.

If the condition is not given, the field is visible.

[Class <@>] A formula to determine the class display. Data is not required.

[Value <@>] Field value. If field value is not of the appropriate type, the field is not forwarded to a mobile device. Data is required.

[Curreny code <@>] Currency label. Valid only for the field type »Currency« in the »Data« section. A new section »Currency options« is opened for the user. Data is required.

Data						
No	Field name	Type	Display name <@>	Condition <@>	Class <@>	Value <@>
1.	dealValue	Currency			"red-label"	@Text (dealValue; "F,2") + " " + currency
Currency options						
No	Name	Currency code <@>				
1.	dealValue					

Image 102: View of settings in the »Data« and »Currency options« for »Currency« field type

[Choices <@>] A set of possible values. Valid only for the field type »Keywords« in the »Data« section. A new section »Keywords options« is opened for the user. Synonyms are supported. For example, if »Person|1« is specified as possible value set and the reference field value is »1«, »Person« is sent to the mobile device. In other cases, the reference field value is sent to the mobile device. Data is required.

Field is multivalued. All values are forwarded to a mobile device which takes care of an appropriate display.

Data						
No	Field name	Type	Display name <@>	Condition <@>	Class <@>	Value <@>
1.	product	Keyword				product
Keywords options						
No	Name	Choices <@>				
1.	product					

Image 103: View of settings in the »Data« and »Keyword options« for »Keywords« field type

6.5.4 Dataset

In the »Dataset« header, the user defines a source of a document set if »Dataset« is the selected section type.

Dataset			
Dataset name:	DATASET_CRM_EV_CorrespondenceAll	Context: <@>	id

Image 104: View of settings in the »Dataset« header

[Dataset name] Name of document set. All document sets are available.

Data is required.

[Context <@>] Document context for document set. Data is not required.

6.5.5 General

In the »General« header, the user defines basic data on section and the position of the executed action in the frame of a section, if »Actions« or »Dynamic actions« are the selected section type.

General		
Display name:	Remove correspondence	Action weight: <@> 1

Image 105: View of settings in the »General« header

[Display name] Display name of the section. Data is required.

[Action weight <@>] Position of action that reflects in the position of action sets in the list, if there are more than one action sets on the document. Data is required.

6.5.6 Actions

In the »Actions« header, the user defines actions and conditions under which they will be performed in the frame of a particular section, if »Actions« is the selected section type.

Actions		
No	Name	Condition <@>
1.	ACTION_CRM_Remove_Cor respondence	author = @UserName

Image 106: View of settings in the »Actions« header

For each action, the user specifies:

[Name] Name of the action. All actions are available. Data is required.

[Condition <@>] A condition under which the action is visible. If condition is not stated, the action is visible. Data is not required.

6.5.7 Interface agents

In the »Interface agents« header, the user defines an interface for action set retrieval, if second type is »Dynamic actions« or »Custom objects«.

For more information see [chapter 6.6.5.1 Extraction of dynamic action sets](#).

Basic information	
Name:	SECTION_CRM_#common#_Attachments
Data type:	Dynamic actions

Description:	Attachments
--------------	-------------

Interface agents	
Database:	DATABASE_CRM
Agent name [Execute action]:	ExecuteProcessAction

Agent name [Get actions]:	GetProcessActions
Agent name [Get action parameters]:	

Image 107: View of settings in the »Interface agents« for »Dynamic actions« section type

Basic information	
Name:	SECTION_CRM_#common#_Attachments
Data type:	Custom objects

Description:	Attachments
--------------	-------------

Interface agents	
Database:	DATABASE_CRM
Agent name [Get custom object content]:	

Agent name [Get custom object list]:	
--------------------------------------	--

Image 108: View of settings in the »Interface agents« for »Custom objects« section type

[Database] Database with the agent for action set retrieval. Data is required.

[Agent name [Execute action]] Name of agent for action execution. Data is required.

[Agent name [Get actions]] Name of agent for action set retrieval. Data is required.

[Agent name [Get action parameters]] The name of the agent to obtain action set parameters. Data is required.

[Agent name [Get custom object content]] The name of the agent to obtain the content of a custom object (application). Data is required.

[Agent name [Get custom object list]] The name of the agent to obtain the list of custom objects for a given document. Data is required.

6.5.8 Content

In the »Content« header, the user defines data on document content view, if »Custom objects«, »IMiS objects« or »Attachments« is the selected section type.

Basic information	
Name:	SECTION_CRM_#common#_Attachments
Data type:	Custom objects

Description:	Attachments
--------------	-------------

Basic information	
Name:	SECTION_CRM_#common#_Attachments
Data type:	IMiS objects

Content	
Name filter: <@> \$OBJDESC represents object description	

Image 109: View of settings in the »Content« for »Custom objects« and »IMiS objects« section type

Basic information	
Name:	SECTION_CRM_#common#_Attachments
Data type:	Attachments

Content	
Name filter: <@> \$ATTNAME represents attachment name	item filter: <@> \$ITEMNAME represents richtext item name

Image 110: View of settings in the »Content« for »Attachments « section type

[Name filter <@>] The condition under which an IMiS® object or attachment is available based on the IMiS® object description or name of the attachment. The reserved word for description of an IMiS® object reference is \$OBJDESC and \$ATTNAME for attachment. If the condition is not stated, the IMiS® object or attachment is available. Data is not required.

[Item filter <@>] The condition under which an attachment is available based on the rich-text item that contains the attachment. The reserved word for field name reference is \$ITEMNAME. It is available if »Attachments« is the section type. If the condition is not stated, the IMiS® object or attachment is available. Data is not required.

6.6 Actions

In the »Actions« section, the user defines configurations that specify pre-selected actions.

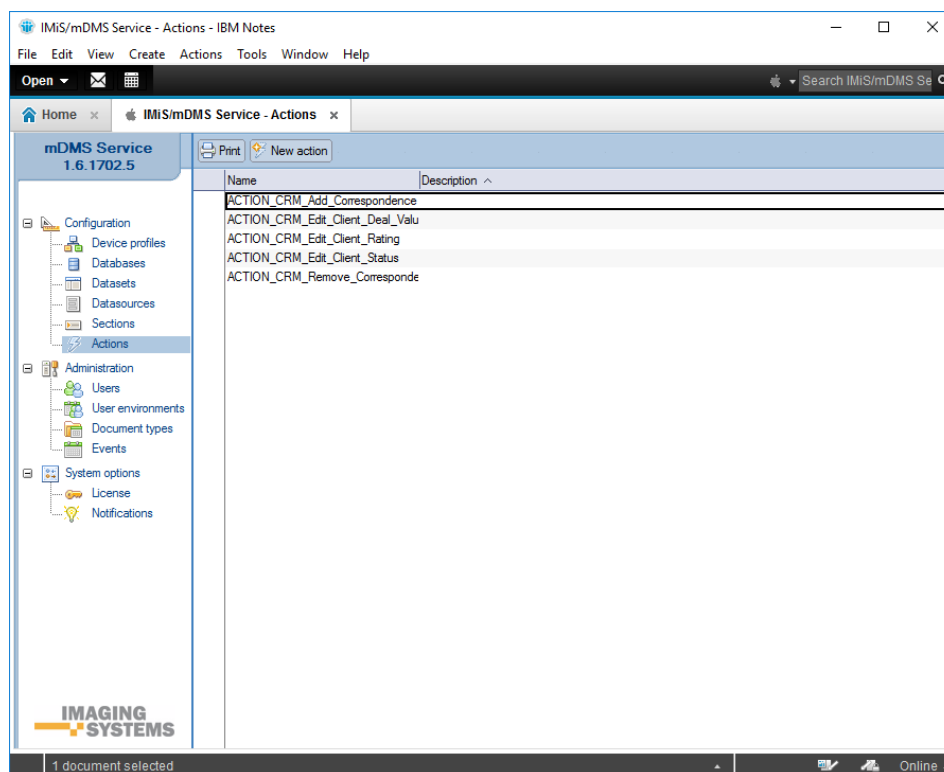


Image 111: View of the »Actions« section

Document fields are divided into the following headers:

- Basic information.
- Additional information.
- Execute.
- Parameters.
- Keywords options.
- Currency options.

6.6.1 Basic information

In the »Basic information« header, the user defines the name of action.

Basic information	
Name:	ACTION_CRM_Edit_Client_Deal_Value
Display name:	Deal value

Image 112: View of settings in the »Basic information« header

[Name] Name of action. Data is required.

[Display name] Displayed action name. Data is required.

[Description] Action description. Data is not required.

6.6.2 Additional information

In the »Additional information« header, the user defines additional information for action.

Additional information	
Confirmation message:	Options: <input checked="" type="checkbox"/> Don't close document after action

Image 113: View of settings in the »Additional information« header

[Confirmation message] A confirmation message on action execution. Data is not required.

[Options] Additional options. Data is not required.

Option set:

- the document remains open after action execution.

6.6.3 Execute

In the »Execute« header, the user defines parameters for action execution.

For more information see [chapter 6.5.5.2 Action execution](#).

Execute	
Database:	Agent name:
DATABASE_CRM	mDMSAction

Image 114: View of settings in the »Execute« header

[Database] A database where agent for action execution is located. Data is required.

[Agent name] Name of agent for action execution. Data is required.

6.6.4 Parameters

In the »Parameters« header, the user defines a field set for action parameters.

Parameters						
No	Name	Display name	Type	Options	Condition <@>	Default value <@>
1.	value	Deal value	Double	Required		dealValue

Image 115: View of settings in the »Parameters« header

[Name] Name of parameter. Data is required.

[Display name] Display name of parameter. Data is required.

[Type] Type of parameter. Data is required.

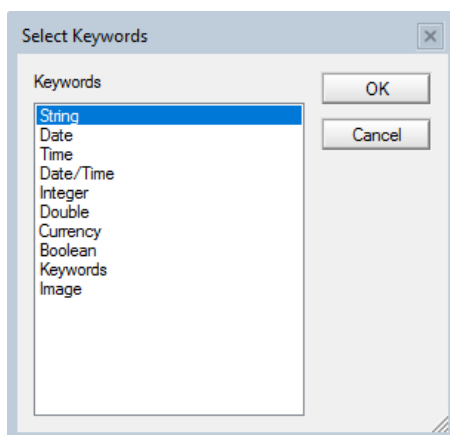


Image 116: View of settings of the field »Type in the »Parameters« header

If selecting the »Currency« parameter type in the »Parameters« header, the user opens a new »Currency options« section with [Currency code] field.

[Currency code] Currency code (e.g. 978 for Euro or 840 for US Dollar). Data is required.

Parameters						
No	Name	Display name	Type	Options	Condition <@>	Default value <@>
1.	value	Deal value	Currency	Required		dealValue
Currency options						
No	Name	Currency code				
1.	value					

Image 117: View of settings in the »Parameters« header for »Currency« parameter type

If selecting the »Keywords« parameter type in the »Parameters« header, the user opens a new »Keywords options« section with [Choices <@>] field.

[Choices <@>] A set of possible values. Synonyms are supported. For example, if »Person|1« is specified as possible value set and the reference field value is »1«, »Person« is sent to the mobile device. In other cases, the reference field value is sent to the mobile device. Data is required.

Field is multivalued. All values are forwarded to a mobile device which takes care of an appropriate display.

Parameters						
No	Name	Display name	Type	Options	Condition <@>	Default value <@>
1.	value	Deal value	Keywords	Required		dealValue
Keywords options						
No	Name	Choices <@>				
1.	value					

Image 118: View of settings in the »Parameters« header for »Keywords« parameter type

[Options] Additional options. Data is not required. Option set:

- »Required«: Parameter entry is required.
- »Read only« Parameter is intended for reading only - e.g., advisable for the »image« type.

[Condition <@>] Condition under which the parameter is available. Data is not required.

If the condition is not stated, the parameter is available.

[Default value <@>] Default parameter value. If it is specified, it should be calculated for the assigned type of parameter. Data is not required.

6.6.5 Action logic implementation

The user can choose between predetermined and dynamic actions.

Predetermined actions are selected by the user then the action set is predetermined.

This option is recommended due to the simplicity of its implementation.

Dynamic actions are selected by the user when an action set cannot be anticipated in advance or if the condition on action availability is too complex or undeterminable.

Usually, that is when the action set is requested by complex business logic.

In that case the user can help himself by letting the business logic take care of action set.

If an application is demanding, it is advisable to create an intermediate database (provider) for requests that specify action sets.

This intermediate database ensures the request is forwarded to an appropriate application database with the required application logic.

Action execution is in the domain of business logic application, no matter whether it is a predetermined or dynamic action. In this case, it is also worth considering creating an intermediate database (provider) for action execution requests that are then forwarded to an appropriate application database for processing.

6.6.5.1 Extraction of dynamic action sets

In the »Interface agents« header, the user defines database in [\[Database\]](#) field and an agent that is contacted in such case in [\[Agent name \[Get actions\]\]](#) field.

IMiS®/mDMS Service calls the agent and forwards a context document with the following fields:

[\[sourceDbServer\]](#) Server containing the document.

[\[sourceDbFilePath\]](#) Path and name of database containing the document.

[\[sourceDocUNID\]](#) Universal document ID.

[\[sourceUserName\]](#) Name of the user, which executes a web service. If the »Run as a web user« option is selected for service, the user is logged in a mobile application otherwise it is a code signer. The first option is advisable due to traceability and the fact that an action set can depend on the user or the user's access rights.

After receiving a IMiS®/mDMS Service all from the agent, the service first checks content in the [\[errorMessage\]](#) field.

[\[errorMessage\]](#) A description of a possible error when specifying action set.

In that case, the service stops the process of specifying an action set and forwards an error description to a mobile device.

If there is no error when specifying an action set, the IMiS®/mDMS Service expects that the number of actions is given in the [\[actCount\]](#) field, and action data in the [\[name_<i>\]](#), [\[displayName_<i>\]](#), [\[confirmMessage_<i>\]](#), [\[options_<i>\]](#) and [\[parCount_<i>\]](#) fields where <i>=1 is <number of actions>.

[\[actCount\]](#) Number of actions (numeric type). Data is required.

[\[name_<i>\]](#) Unique name of action. Data is required.

[\[displayName_<i>\]](#) Unique displayed name of action. Data is required.

[confirmMessage_<i>] Confirmation message of action execution. Data is not required.

[options_<i>] Additional options. Data is not required.

Option set:

- »1« - the document remains open after action execution.

[parCount_<i>] Number of parameters for action (numeric type). Data is required.

If parameters are anticipated for action, the IMiS®/mDMS Service expects data on parameters in the [parName_<jj>_<i>], [parDisplayName_<jj>_<i>], [parType_<jj>_<i>], [parOptions_<jj>_<i>], [parConditionFrm_<jj>_<i>], [parDefaultValueFrm_<jj>_<i>], [parCurrCode_<jj>_<i>] and [parChoicesFrm_<jj>_<i>] fields, where <i> is action sequence number, and <jj>=01...<number of action parameters>.

[parName_<jj>_<i>] Unique name of parameter. Data is required.

[parDisplayName_<jj>_<i>] Unique displayed name of parameter. Data is required.

[parType_<jj>_<i>] Type of parameter. Data is required.

Option set:

- »1« - String
- »2« - Date
- »3« - Time
- »4« - Date/Time
- »5« - Integer
- »6« - Double
- »7« - Currency
- »8« - Boolean
- »9« - Keywords
- »10« - Image.

[parOptions_<jj>_<i>] Additional options. Data is not required.

Option set:

- »1« - parameter entry is required.
- »2« - parameter is intended for reading only (for example, advisable with the »image« type).

[parConditionFrm_<jj>_<i>] Condition under which the parameter is available.

Parameter is available if no condition is stated. Data is not required.

[parDefaultValueFrm_<jj>_<i>] Default value of parameter. If it is specified, it has to be calculated for the assigned type of parameter. Data is not required.

[parCurrCode_<jj>_<i>] Currency label. Applicable only with the »currency« type of parameter. Data is not required.

[parChoicesFrm_<jj>_<i>] A set of possible values. Synonyms are supported. It is applicable only with the »keywords« type of parameter. Data is required.

6.6.5.2 Action execution

In the »Execute action« header, the user defines database in [Database] field and an agent that is contacted in such case in [Agent name] field.

IMiS®/mDMS Service calls the agent and forwards a context document with the following fields:

[sourceDbServer] Server containing the document.

[sourceDbFilePath] Path and name of database containing the document.

[sourceDocUNID] Universal ID of document.

[sourceDocLastModified] Date and time of last document modification at the time of opening the document on a mobile device. It is advisable for the business logic to check whether the document has been modified during that time. In that case, action execution is not advisable as it could lead to a conflict when saving the document.

[sourceUserName] Name of effective user. If the »Run as a web user« option is selected for service, the user is logged in a mobile application otherwise it is a code signer. The first option is advisable due to traceability and the fact that an action set can depend on the user or the user's access rights.

[sourceAction] Name of selected action.

If parameters are anticipated for action, the service expects data on parameters in the [parName_<jj>], [parType_<jj>] and [parValue_<jj>] fields, where <jj>=01 is <number of action parameters>.

[parName_<jj>] Name of parameter.

[parType_<jj>] Type of parameter. The option set is identical as when obtaining action set.

[parValue_<jj>] Value of parameter.

7 Administration

In the »Administration« section the administration of users, environment, types of (supported) files and events is examined.

7.1 Users

In the section »Users«, the user adds individual users and assigns them profiles.

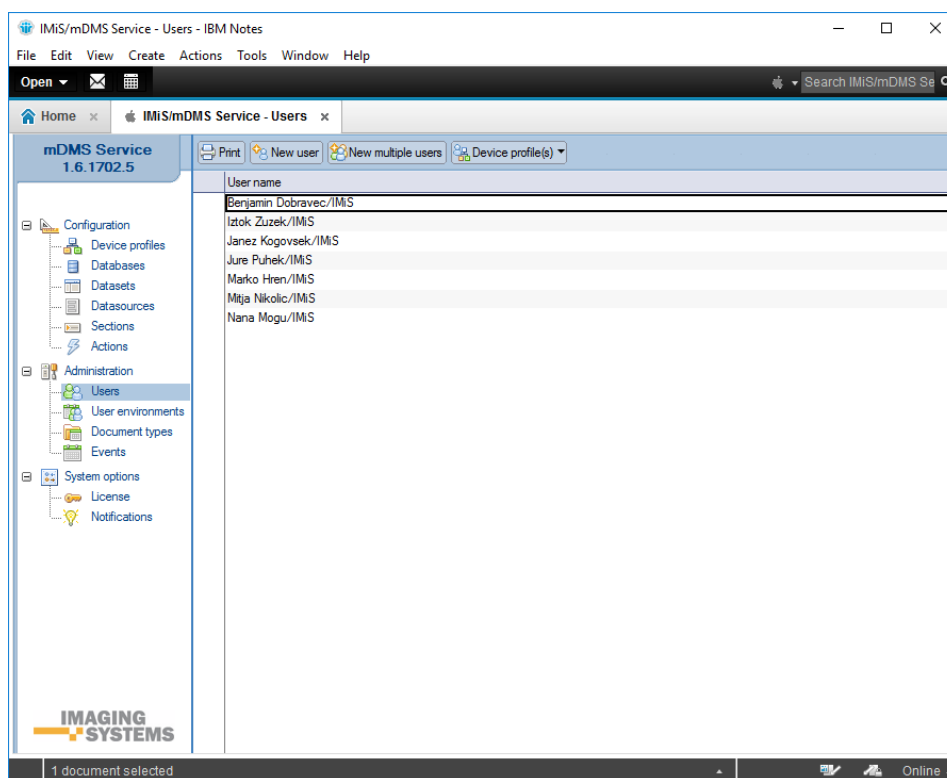


Image 119: View of the »Users« section

Document fields are specified in the following header:

- Basic information.

7.1.1 Basic information

In the »Basic information« header, the user defines username and assigns the profile of the device.

Basic information	
User name:	Benjamin Dobravec/IMiS
Assigned device profiles:	Tablets on iOS 7.*.x & 8.* & 9.* - 1/0 Configuration - 2/0

Image 120: View of settings in the »Basic information« header

[User name] Name of the user. Data is required.

[Assigned device profiles] Profiles assigned to the user. Data is not required.

7.2 User environments

In the section »User environments« the user has an overview of the activities of individual device users.

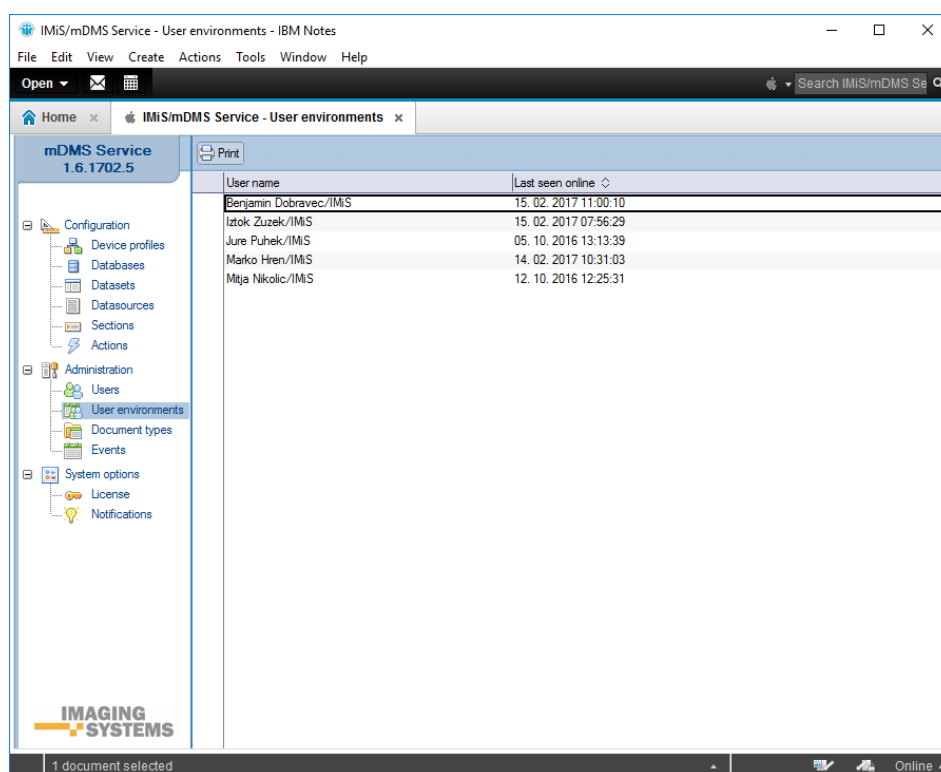


Image 121: View of the »User environments« section

Document fields are divided into the following headers:

- Basic information
- Data.

7.2.1 Basic information

In the »Basic information« header, the user defines username and assigns the profile of the device.

Basic information	
Last seen online:	19. 12. 2016 11:17:55

Image 122: View of settings in the »Basic information« header

[Last seen online] Date and time of last user activity. Data is read-only.

7.2.2 Notification

In the »Notification« header all notifications are listed. All field values except »Enabled« are read-only. The user can delete notification identifiers by selecting **X** behind the sequence number of a notification.

Notification						
No	Notify token	Profile id	Protocol	Edition	Locale	Enabled
1	<input checked="" type="checkbox"/> c0b3a05a6a76ef9b80b6e3152687ec585cec97a9c5800bbf71db8e99e47413c	d4ac9c7a11f707a141f82776e9e1f5f839fcd2d9	iOS	Plain	hr-HR	<input checked="" type="checkbox"/>
2	<input checked="" type="checkbox"/> e0ca62dbd0362599c93afcf019c339dca29f20e892fb18bf3b2ff53286bc0f1	df38cb18fcff6a2ec787f789d44e4c23e19e1613	iOS	Plain	en-US	<input checked="" type="checkbox"/>
3	<input checked="" type="checkbox"/> FXVJ4XySqpw:APA91bGNymt2K5FWvWNIRV6NiPgI5AlngWgctN4GbomjriEi-WOvf1YQFAa0EogIhtwXaRdhN_OVw2wvsvtBp1ZfHU1jLrbPMoSKml7bvMAwFZHJ_2A5bz8rDZx7L5dE9n7Zo60TONpQ	fa551c7ea5c2aed7d2154245eee4ce3b751c9cb1	FCM	Plain	sl-SI	<input checked="" type="checkbox"/>
4	<input checked="" type="checkbox"/> 2027038819ae4e68aec4b070efd3db23478b8da4faf5c4b0ac63ddbf116a401e	18ad6f7bc142958bc10a1f48286238a288f50a37	iOS	Plain	en-SI	<input checked="" type="checkbox"/>
5	<input checked="" type="checkbox"/> APA91bFMpOYFGGxtSfPcMX7K-sBQULN9fUyWxhkEDPMEdKyvqUgOpGDVcrYBmOtZqT027J80E5cDNg8hR08ZJ2aGs7XUGjN6BAI3S_Y2_tey77UjmSWA	f181dfc024c829db617f7af5a9b66366024d76b1	FCM	Plain	sl-SI	<input checked="" type="checkbox"/>
6	<input checked="" type="checkbox"/> cCakI3kb1CY:APA91bHMW6iZoWYmKZm76UuM0py4Tfq7Kmxg_67nu5ahcI0wyeW5DYTWfJkNjJO9wslYQP040PGyX2MsXyi-qYMjWKABTzznwWg-PqAWUXAxSJW_jJYFkuaLgHg87MdjQ24XAqEZFT	a385cbc927fa9dc4c8566485f26d0d188cf8bd2	FCM	Citrix XenMobile	en-US	<input checked="" type="checkbox"/>

Image 123: View of the »Notifications « header

[Notify token] Notification identifier.

[Profile id] Unique profile identifier.

[Protocol] Mobile device protocol denotation.

[Edition] Tag of the application installation edition (Plain / Citrix XenMobile / MobileIron).

[Locale] Content notification localization.

[Enabled] Notification status (enabled / disabled).

For more information see [chapter 8.2 »Notification«](#).

7.2.3 Device environments

In the »Device environments« an overview of user activity data on the mobile device and device, application and configuration information are available. All field values are read-only.

Device environments						
No	Created	Updated	Application version	Device	Configuration	More info
1. 	14. 10. 2016 14:46:02	14. 10. 2016 14:46:36	1.5.1610.9	Android 6.0.1 on asus Nexus 7	Tablets on iOS 7.*.x & 8.* & 9.*	Details
2. 	17. 10. 2016 08:13:30	17. 10. 2016 08:24:18	1.4.1606.21	iPhone OS 9.3.5 on Apple iPad3,3	Configuration	Details
3. 	17. 10. 2016 09:12:03	17. 10. 2016 09:14:05	1.4.dev.23	iOS 10.0 on Apple x86_64	Configuration	Details
4. 	07. 11. 2016 14:16:27	07. 11. 2016 14:22:20	1.5.1610.24	iPhone OS 9.3.5 on Apple iPad3,3	Configuration	Details
5. 	23. 11. 2016 09:10:16	28. 11. 2016 14:50:08	1.5.1611.26	iPhone OS 9.3.5 on Apple iPad3,3	Configuration	Details
6. 	23. 11. 2016 09:13:45	23. 11. 2016 09:13:45	1.5.1610.26	iOS 10.1.1 on Apple iPhone5,2	Configuration	Details
7. 	19. 12. 2016 11:17:55	19. 12. 2016 11:17:55	1.5.1611.26	iPhone OS 9.3.5 on Apple iPad3,3	Configuration	Details
8. 	05. 01. 2017 10:59:24	06. 01. 2017 15:04:28	1.5.1611.26	iOS 10.2 on Apple iPhone5,2	Configuration	Details

Image 124: Overview of user activity data in the »Device environments« header

[Created] Date and time of user environment creation.

[Updated] Date and time of last user environment modification.

[Application version] Application version.

[Device] Name of device.

[Configuration] Configuration type.

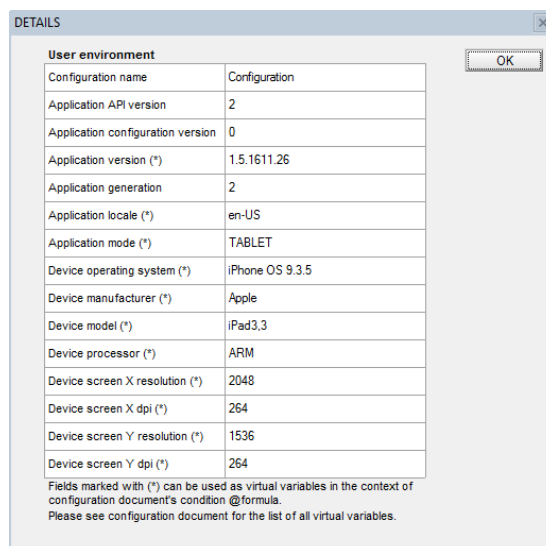


Image 125: A more detailed view of device, application and configuration data in the »Device environments« header

7.3 Document types

In the »Document types« section, the user defines the types of documents (files) that will be enabled on a mobile device.

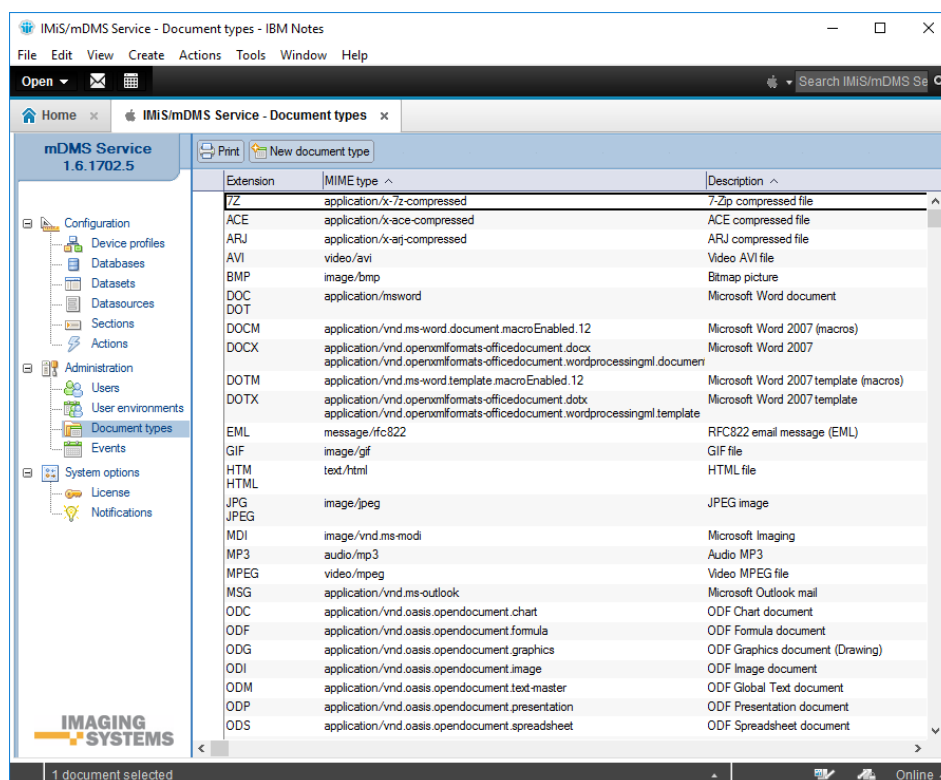


Image 126: View of the »Document types« section

Document fields are divided into the following headers:

- Basic information
- Data.

7.3.1 Basic information

In the »Basic information« header, descriptions of a document type (file), extension and MIME type are noted.

Basic information			
Description:	Microsoft Word 2007	MIME type(s):	application/vnd.openxmlformats-officedocument.docx application/vnd.openxmlformats-officedocument.wordprocessingml.document
Extension(s):	DOCX		

Image 127: View of settings in the »Basic information« header

[Description] Description of document type. Data is required.

[Extension(s)] Document type extension. Field is multivalued. Data is required.

[MIME type(s)] MIME type of document. Field is multivalued. Data is required.

7.4 Events

In the »Events« section user events on a mobile device are recorded.

All field values are read-only.

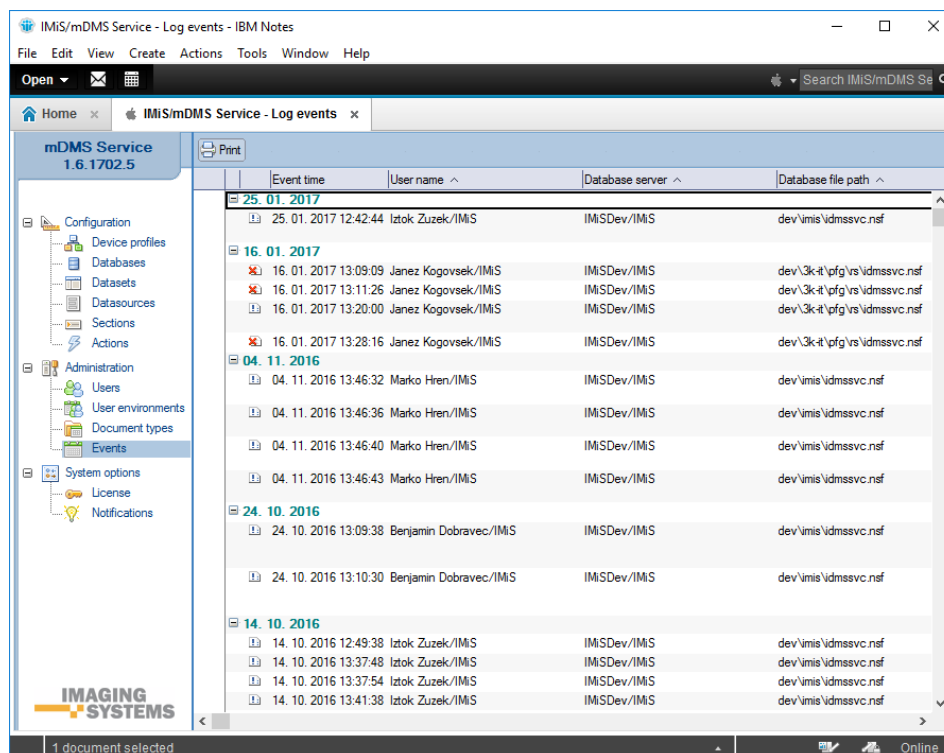


Image 128: View of the »Events« section

[Event time] Date and time of the event.

[User name] Name of the user.

[Database server] Name of the server that the user has accessed.

[Database file path] Path o the database.

[Event information] Information about the event.

8 System options

In the »System options« section, mobile device management options are examined.

8.1 License

In the »License« section, the user has an overview of the license key.

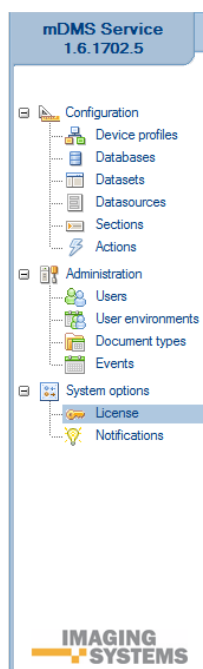


Image 129: Selection of »License« section

The user opens a dialog box showing information on the license key.

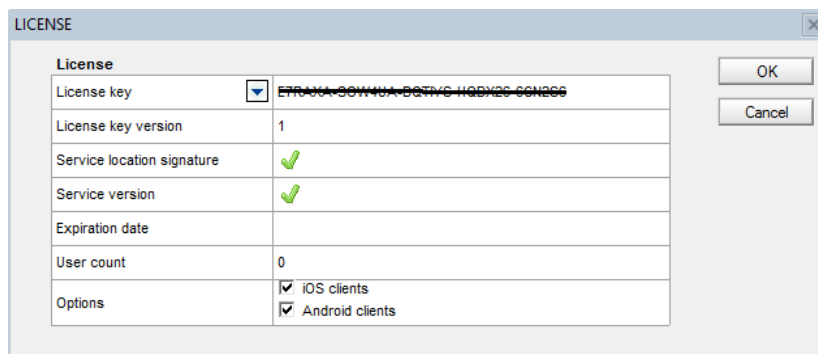


Image 130: View of data in »License« section

[License key] License key.

[License key version] License key version.

[Service location signature] Relevance of the license key for IMiS®/mDMS Service database location.

[Service version] Relevance of the license key for IMiS®/mDMS Service database version.

[Expiration date] License key expiration date.

[User count] Numer of users.

[Options] Client platform.

The following options are available to the user:

- iOS clients.
- Android clients.

8.2 Notifications

In the »Notifications« section, defines the users and groups that can request the execution of notifications.

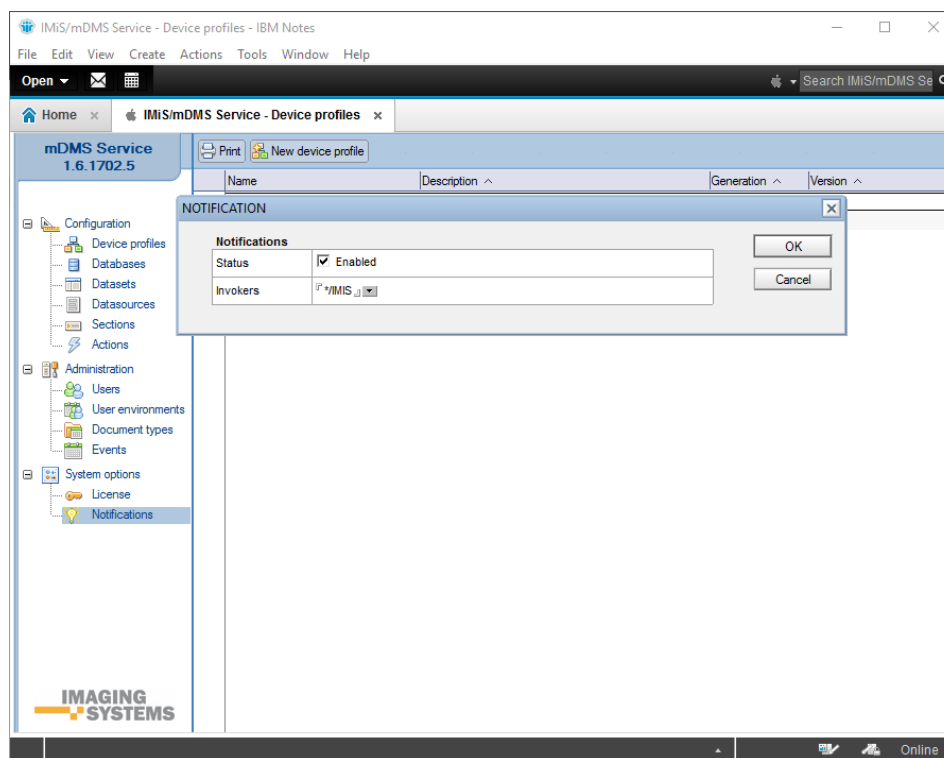


Image 131: View of the »Notifications« section

Notifications are used to notify the application users.

Examples of notifications:

- received new documents for confirmation
- received documents as content, i.e. new received e-mail.

In the »Notification« section, the user defines notification settings.

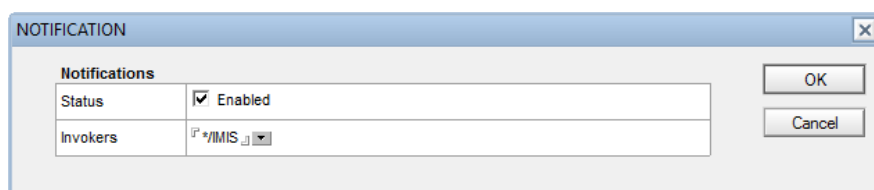


Image 132: View of the »Notification« section settings

[Status] Status of notifications (enabled/disabled).

[Invokers] Notes users or groups that can request the execution of notifications.

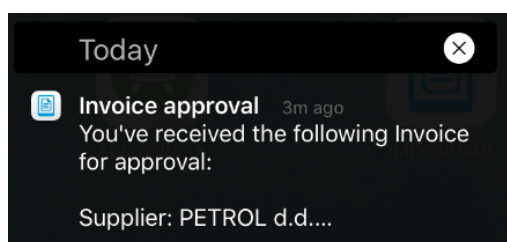
8.2.1 Application response when receiving a notification

When a notification arrives to the mobile device, the application responds differently depending on whether the IMiS®/mDMS Client application is open, closed or open in the background.

8.2.1.1 Closed application

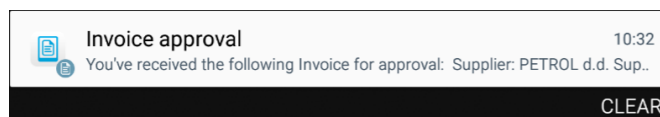
Below are described the events after receiving a notification when the application is closed (inactive):

1. The notification is added to the list of received notifications on the mobile device.
2. The message about the received notification is displayed in the form of:
 - a notification bar in the upper part of the screen (iOS)



- an icon in the upper left part of the screen and a message if a sliding menu is selected (Android).





3. When choosing a notification, the application displays a login window to the user.
4. Based on the »profile« attribute, the application selects the appropriate profile in the login window. ([see chapter 8.2.2 Notification structure](#)).
5. After a successful login the user is displayed a notification document. This is the document, for which the notification was sent.

8.2.1.2 Application open in the background

Below are described the events after receiving a notification when the application is open (active)

in the background:

1. The notification is added to the list of received notifications on the mobile device.
2. The message about the received notification is displayed in the form of:
 - a notification bar in the upper part of the screen (iOS)
 - an icon in the upper left part of the screen and a message if a sliding menu is selected (Android).
3. When choosing a notification, the application is displayed in the foreground.
4. The user is displayed the notification document based on the »profile« attribute and the session as follows ([see chapter 8.2.2 Notification structure](#)).
 - If the user is currently not logged in and his session has expired or there is already an application running at the login dialog, the application does as follows:
 - Based on the »profile« attribute, the application selects an appropriate profile in the login window.
 - After a successful login the user is displayed a notification document.
 - If the notification profile is the one the user is currently using, and his session is still valid, the next notification document is opened.

8.2.1.3 Application open in the foreground

Below are described the events after receiving a notification when the application is open (active) in the foreground:

1. The notification is added to the application. The notification is displayed to the user as a dialog only if the user does not have an open notification document. Otherwise, the notification is added to the notification list, which is triggered in a dialog when the user closes the notification document.
2. If the user does not choose to display a notification document, he can simply delete the notification. Otherwise, he can skip step 2.
3. Based on the »profile« attribute, the application responds as follows ([see chapter 8.2.2 Notification structure](#)).
 - If the user is currently not logged in and his session has expired or there is already an application running at the login dialog, the application does as follows:
 - Based on the »profile« attribute, the application selects an appropriate profile in the login window.
 - After a successful login the user is displayed a notification document.
 - If the notification profile is the one the user is currently using, and his session is still valid, the next notification document is opened.

8.2.2 Notification structure

8.2.2.1 Notification structure on iOS mobile device

```
{
  "aps":{
    "alert":{
      "title" : "Novi dokument",
      "body" : "Dobili ste novi dokument."
    },
    "sound":"default"
  },
  "data_v1" :{
    "profile" : "df38cb18fcff6a2ec787f789d44e4c23e19e1613",
    "datasource" : "DATASOURCE_CRM_contact",
    "ctx" : "D#B910683818E4EBA8C1257F01003C4205"
  }
}
```

Image 133: Example of the notification structure on iOS mobile device

Description of the parameters of the »aps« system list:

- alert*: Alert notification content.
 - title [string]: Notification title.
 - body [string]: Notification description.
- sound [string]: name of the sound when displaying a notification.

Description of the parameters of a customized »data« list (_v1 means the content relates to version 1):

- profile* [string]: id of the application profile coded with SHA-1
 - datasource* [string]: Document content.
 - ctx [string]: Document context.
 - to [string]: Token.

8.2.2.2 Notification structure on Android mobile device

```
{
  "to": "token...",
  "data": {
    "title": "IMiS/mDMS",
    "body": "...",
    "data_v1": {
      "profile": "...",
      "datasource": "...",
      "ctx": "..."
    }
  }
}
```

Image 134: Example of the notification structure on Android mobile device

Description of the parameters of the »to« system list:

- to [string]: Token.

Description of the parameters of the »data« system list:

- title [string]: Notification title.
- body [string]: Notification description.
- data_v1 [string]: Notification content.

Description of the parameters of a customized »data« list (_v1 means the content relates to version 1):

- profile*[string]: id of the application profile coded with SHA-1.
- datasource*[string]: Document content.
- ctx [string]: Document context.

8.2.3 Content notification localization settings

In the IMiS®/mDMS Provider database you can change the content notification localization settings. The user chooses "Notifications/ By module" in the navigation menu. He selects the notification by pressing the "Sync from Settings" button and selecting it from the list of all notifications, and then transferring it to the notification list for a specific application module. The notification becomes active in the list by pressing the » Enable« button or inactive by pressing the »Disable« button.

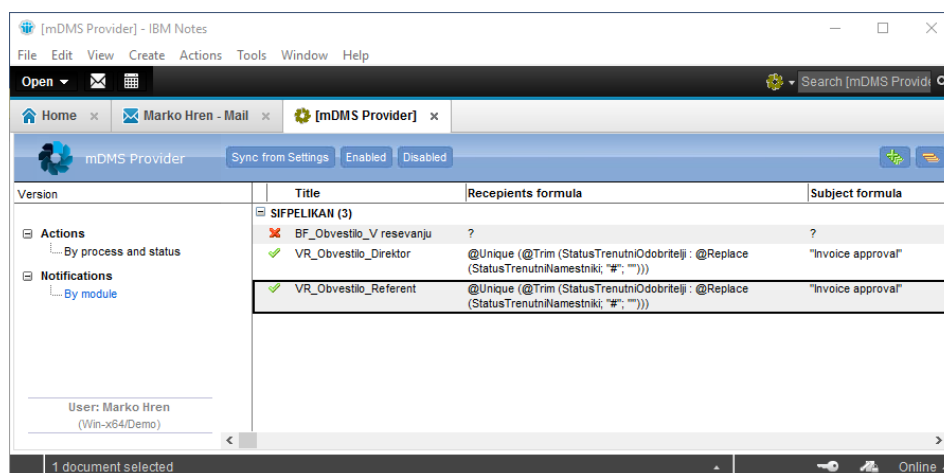


Image 135: View of the notification settings in IMiS®/mDMS Provider database

Actions on indexes

[Sync from Settings] Synchronize from the list of all notification in the IMIS®/mDMS Provider collection.

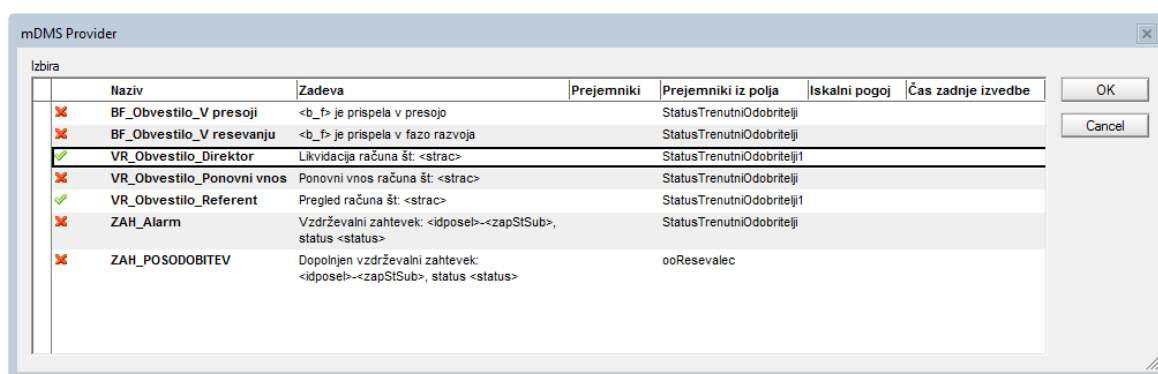


Image 136: View of notifications available for synchronization

[Enabled] Notification is enabled.

[Disabled] Notification is disabled.

By selecting a notification in the list, the user opens the notification settings.

Notification

Alarm		<input checked="" type="checkbox"/> Enabled
Module	SIFPELIKAN	Title VR_Obvestilo_Direktor

Notification	
Recipients formula	@Unique (@Trim (StatusTrenutniOdobritelj : @Replace (StatusTrenutniNamestniki, "##", "")))

No.	Locale	Subject formula	Content formula
	Default locale	"Invoice approval"	{You've received the following Invoice for approval: Supplier: } + podjetje + { Supplier Invoice no.: } + strac
1.	sl-SI	"Likvidacija računa"	{Prejeli ste račun v likvidacijo: Dobavitelj: } + podjetje + { Dobaviteljava številka računa: } + strac

Image 137: Content notification localization settings in the IMiS®/mDMS Provider database

[Module] Name of the application module, in which the notification is executed.

[Title] Notification title.

[Recipients formula] Notification receivers. The formula is calculated in the context of the contextual document.

[Default locale] Default content notification localization.

[<locale>] Additional content notification localization. The user chooses one or more localization parameters from the list.

The localization parameter is linked to a notification token, which is specified in the user environments under administration in the IMiS®/mDMS Service database.

[Subject formula] Formula to specify the notification object. Data is required.

[Content formula] Formula to specify the notification content. Data is required.