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1 INTRODUCTION

The preface presents the contents and structure of the IMiS[®]/iDMS Guide and provides useful technical and content-related information on how to use the iDMS application.

1.1 Purpose of the guide

The guide describes administrator tasks required for the management of the IMiS[®]/iDMS application. It is intended for:

- installation of the IMiS[®]/iDMS application;
- configuration of the IMiS[®]/iDMS application for running on mobile devices;
- customization of the IBM Notes application for running on mobile devices;
- error identification and troubleshooting.

1.2 Target audience

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

1.3 Scope and requirements

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

For information on the installation of IMiS[®]/Admin, the IMiS[®] technical support is at your disposal at the email address: <u>support@imis.si</u>.

1.4 Conventions

The guide uses various styles and colours to highlight important information. These are explained below:

Text:

Style	Purpose
Regular	Basic information, description of functionalities
<u>Underlined text</u>	Field values
»Quotation«	Names of headers and tabs, warnings
[Red text]	Names of actions with selected settings, options selectable from
	the dropdown menu
[Blue text]	Names of Notes document fields
[Green text]	Section and contained section 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 [®] /iDMS Service	A web service for forwarding IDMS application settings and IBM
	Notes application data
IMiS [®] /iDMS Client	A mobile application for display and running of IBM Notes
	application on a mobile device
IMiS [®] /iDMS Service	An application used by $IMiS^{\ensuremath{\mathbb{B}}}/iDMS$ Service for obtaining and
Provider	running customized actions in an IBM Notes application.

2 PRESENTATION

2.1 General

The architecture and concept of the iDMS 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 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

iDMS is a web service that provides centralized management and application user control. It 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 iDMS are:

- use of any IBM Notes application on mobile devices without any adjustment;
- adjustment of application appearance and functionality without any intervention in the application code or iDMS component;
- document viewing on a mobile device with access to archived content through menu;
- document action implementation through IBM Notes application's process actions;
- display of the IBM Notes document views;
- document search in metadata and full-text documents;
- application appearance remains the same regardless of the mobile device;
- document data display with open/closed sections in portrait and landscape mode of a mobile device.

3 ARCHITECTURE

3.1 General

IMiS[®]/iDMS system is a 3-tier system in the client-server model of architecture (<u>https://en.wikipedia.org/wiki/Multitier architecture#Three-tier architecture</u>) with the following tiers:

Presentation tier: It is represented by the native IMiS[®]/iDMS Client application for currently supported mobile platforms iOS in Android. The Client must be installed on mobile device. It connects to the IMiS[®]/iDMS Service, which represents the Logical tier and through configuration profiles services configuration markup and data to its clients. IMiS[®]/iDMS 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 configuration instructions, provisioned by the Service based on the mobile device version, type, and language. Client downloads this configuration bundle at login stage if not already cached locally (configuration versioning supported). This bundle defines how surfaced applications should look and feel like. Client never dictates how the application data is displayed since its designed to be a "empyt shell", an interpreter of data, similarly to web browsers. That is why the same IMiS[®]/iDMS Client can be used to surface heterogeneous applications in a common UI or can be configured to display the same data/applications totally differently.

It uses Hyper Text protocol to communicate with the Service layer (HTTP -

<u>https://en.wikipedia.org/wiki/Hypertext Transfer Protocol</u>), which can be optionally encrypted using latest encryption standards (PKI/TLS). Communication specifics are set by the Service. User can also choose to use 3rd party MDM solutions such as MobileIron Inc. (<u>https://www.mobileiron.com</u>) for added protection and provisioning services. These platforms greatly enhance the security and manageability of the devices and IMiS[®]/iDMS Client application.

Logical tier: It is represented by the IBM Domino application through its SOAP Service. Service application contains configuration data and service logic for provisioning configuration profiles and data to its clients. It exposes an Administration interface for setting system related parameters and operational monitoring. Application settings are controlled by an administrator through an intuitive and easy-to-use interface without having to have expert knowledge on mobile platforms and/or IBM Notes Application development. Service can access Data tier (IBM Notes applications) locally or remotely and spread the application execution load on multiple IBM Domino nodes. Through so called Provider extensions it enables Clients to execute application specific actions which 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 Service application is totally abstract and doesn't allow user customization to drive custom actions.

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

Data tier: The tier is comprised of existing IBM Notes applications with documents (data) and business logic which can be hosted locally or on other IBM Domino servers to which the web server has access to. The 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. Service can also be configured to access and service digital content attached to IBM Notes Documents.

External ECM system can also be used for efficient content management. Currently IMiS/ARChive Storage Server is supported. More on this: <u>http://www.imis.eu/en/products/imisarchive-server/</u>.



4 USAGE

This chapter defines IBM Domino server administrator and mobile user tasks in order to set up an IBM Domino/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 Operation setup

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

- Create an administration interface of iDMS service. <u>For more information, see chapter</u> <u>5.2 Administration interface generation</u>.
- 2. Create a list of documents. If index is not available, create it. If necessary, implement custom logic for document listing. *For more information, see chapter 6.2 »Datasets«*.
- 3. Specify data that is shown on a mobile device. Organize data in sections so that section data is still manageable in that the section can be used in different document sets if possible. Create document types and specify their assigned sections. <u>For more information, see chapter 6.3 »Datasources«</u> and <u>chapter 6.4 »Sections«</u>.
- Create two sections for attachment and IMiS[®] viewing. Set them to document types that will have this functionality available. *For more information, see chapter 6.4* <u>»Sections«</u>.
- Create actions, place them in sections and place the sections to document types or data sets. See to action implementation. *For more information, see chapter 6.4 »Sections«* and *chapter 6.5 »Actions«*.
- Specify the appearance of the application. <u>For more information, see chapter 6.1</u> <u>»Configurations«</u>.

For an IBM Notes application operation setup on a mobile device, the user takes the following steps on the mobile device's page:

 Installation of the IMiS[®]/iDMS application from Apple AppStore. The application is named »IMiS/iDMS«.



Image 1: Installation of the IMiS[®]/iDMS application from Apple Store on a mobile device

 After a successful installation on a mobile device, the application needs to be run. The user chooses a profile.



Image 2: Choosing profile of the IMiS®/iDMS application

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

Carrier 🗢		2:27 PM		100%
	Back	Profiles		
			Login	
	Add			

Image 3: Adding new profile

- 4. When the profile's dialogue box opens, insert the following data.
 - Name: profile name.
 - Service address: address of iDMS web service.
 - Service username: Optional username save if login is successful. Username is inserted in the form at next login.
 - Save credentials: Optional password save if login is successful. The password is coded and automatically inserted at next login.

The user confirms the information by clicking »Back«.



Image 4: 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. Profile data can be changed in »Settings«, should the user wish to do so. The user confirms the information by clicking »Back«.



Image 5: Selecting the chosen profile

6. The user inserts username and password and confirms login by clicking »Login«. <u>Warning</u>: In case the service requires a VPN Client, the user should run it beforehand (e.g. Cisco AnyConnect).

Carrier 🗢		3:14 PM		100%
		IMiS / iDMS Client for iPad		
		John		
		•••••		
	CRM		Login	

Image 6: Login into the IMiS®/iDMS application

4.2 Example of use

Following is an example how the iDMS system can be used to mobilize a simple CRM IBM Notes Desktop application, which is strapped into iDMS framework to be surfaced and used on mobile devices. CRM application is used for simple CRM processes such as tracking sales activities and entering metadata for statistics and CRM decisions.

Desktop CRM application user enters data about a lead that he/she is working. He does that through IBM notes Desktop client. It states the source, 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 same CRM application can leverage his mobile device to coordinate and supervise the sales team actions and performance. The nature of his work prevents him from accessing Desktop version of CRM application. He uses mobile application to update certain data and adds comments to sales activities. Desktop version of CRM application displays the list of sales contacts. Left navigation enables user to sort the contacts according to certain criteria. Search bar above contacts can be used for searching with the help of full text index, which indexes all contacts metadata. User can add contacts, print them, etc...

IMiS/iDMS Sample CRM appli	cation - Contacts \ By company - IB	M Lotus Notes						
File Edit View Create Acti	ions Tools Window Help							
Open 🦆 💽 🔝 IMi S/iD	MS Sample CRM application -	×						
🗙 - 号 🔕 🗞 🗞 –	*							
IMiS/iDMS Sample CRM application	Print New contact							
	Q Search in View 'Contacts	\ By company'					🔘 Index	xed ? ×
Contacts	Search for				Sear	ch	Search tips	More
By company	Company	Country ~	Owner ^	Products	Deal value	Curr.	Rating ^	Status ^
by owner	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	8.500,00	EUR	Not qualified	New
	Ekrem Systems Ltd.	United Kingdom	Sales person 3	Project.Track.Server Project.Web.Client Project.Track.Services	6.900,00	EUR	Qualified	Presentation
	Exito 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.Connector	6.700,00	EUR	Qualified	Postponed
	KM Bilgisayar Yazılımları A.Ş.	TÜRKİYE	Imaging Systems	Project.Track.Server Project.Web.Client Project.Track.Report	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.	TÜRKIYE	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. Web. Client Project. Mobile. Client	9.000,00	EUR	Not qualified	New
	Smart Solutions Co.	Kingdom of Saudi Arabia	Imaging Systems	Project.Track.Server Project.Web.Client	5.900,00	EUR	Qualified	Negotiation
- OTOTEMO	Takok Bank Sh.A.	Albania	Sales person 3	Project.Track.Server	40.000,00	EUR	Qualified	Presentation *

Image 7: Overview of business contacts through IBM Notes Desktop version of CRM application

Mobile CRM application user launches the CRM application in iDMS by pressing on the CRM application icon.



Image 8: CRM application launching by pressing on the application icon

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

Carrier 穼	3:16 PM	100%
Applications	Contacts by company	Q
By company By owner	Dynamics Australia Australia Raiting: Not qualified, Status: Information	21.000,00 EUR
	Ecco Software Pty Ltd VIC, Australia Raiting: Not qualified, Status: New	8.500,00 EUR
	Ekrem Systems Ltd. United Kingdom Raiting: Qualified, Status: Presentation	6.900,00 EUR
	Exito Consulting AS Norway Raiting: Not qualified, Status: Information	12.500,00 EUR
	Fortunat AB Sweden Raiting: Qualified, Status: Postponed	6.700,00 EUR
	KM Bilgisayar Yazılımları A.Ş. TÜRKİYE Raiting: Not qualified, Status: New	14.000,00 EUR
	Kopela Oy Finland Raiting: Not qualified, Status: Lost	17.000,00 EUR
	Ligo Teknoloji Ltd. Şti. TÜRKİYE Raiting: Qualified, Status: Proposal	42.000,00 EUR
	Multiproject d.o.o. Slovenia	16.000,00 EUR

Image 9: List of sales contacts viewed through mobile version of CRM application

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

Image 10: An example of a sales contact displayed in Desktop version of CRM application

An iDMS developer defines how the iDMS should display the same data in mobile version of the CRM application in app configuration. It also defines which data is displayed where.

•	Fortunat AB	6.700,00 EUR
	Sweden	
	Raiting: Qualified, Status: Postponed	

Image 11: Data display customization on mobile device

Desktop CRM user creates a new sales contact and populates the data fields.

ontact - IBM Lotus No	otes							
Edit View Create	Actions To	ools Window Help						
en 🦆 🕒 🖪 IM	liS/iDMS Sam	ple CRM application	1 × 🗗	Contact ×				
• 🖯 🙁 🦘 🥎	2 + -	A 🗞 🚳						
Close ØEdit							Bevis	sion
CONTACT Qual	lified / Postp	ooned					IMAGING SYSTEM	S
Lead								
Name / Sumame:		Mr. Thomas Grönvik			Position	1:	CEO	-
Company:		Fortunat AB			Addres	s:	Brunnsgatan 89	
Zip / City		SE-824 26 Hudiksvall			Country	r.	Sweden	
E-mail:		thomas.gronvik@fortu	nat.se		Web a	ddress:	http://www.fortunat.se	
No. of employees:		35			Comme	ent:		_
Source								
Source:		Business partner			Detail:		Releye AB	-
Owner Owner:		Business partner			Detail:			_
Deal								
Product(s):		Project.Track.Server Project.Web.Client Project.Connector			Deal va	alue:	6.700,00 EUR	_
Correspondence								
All By type								
Add Bemove								
Created	Author		Туре	Attachments		Content		
	Marko Hren		Email			Hello, It is not interesting for	us. Have a nice day! Med vänliga hälsningar Thomas Grönvik	*
19.11.2015 13:26:28			Email			Sent information about produ	uct.	
19.11.2015 13:26:28 19.11.2015 13:25:53	Marko Hren							
19.11.2015 13:26:28 19.11.2015 13:25:53 19.11.2015 13:24:34	Marko Hren Marko Hren		Phone call			We discussed bout the solut	tion. He requested additional information.	

Image 12: User enters new sales contact data through desktop version of CRM application

Based on the configuration of IMiS[®]/iDMS application, an iDMS developer can choose which data can be modified through mobile version of the application.

CONTACT Qualifi	🕻 Edit			
				Rating
Lead				Status
Name / Surname	Mr. Thomas Grönvik	Position	CEO	Dealwalue
Company	Fortunat AB	Address	Brunnsgatan 89	Deal value
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 13: An example how a mobile user can choose a modification action

CONTACT Qualified / Postponed		Rating			6
Lead		Rating		Qualified	
Name / Surname	Mr. Thomas Grönvik				
Company	Fortunat AB				isgatan 89
Zip / City	SE-824 26 Hudiksva		Qualified		en
E-mail	thomas.gronvik@for		Not qualified		/www.fortunat.se
No. of employees	35				
> Sourco					
> Source		Cancel		Ok	
> Owner					

Image 14: An example how a mobile user changes data on mobile device

iDMS developer 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.

rrier ຈ		3:17 PM		100%
Contacts by com	pany			
CONTACT Qualifi	ed / Postponed			S
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		
> Owner				
✓ Dear				
Product(s)	Project.Track.Server Project.Web.Client Project.Connector			
Deal value	6.700,00 EUR			
Corresponde	nce - All			Q
All	Marko Hren			19.11.2015 13:26:28
By type	> Email Hello, It is not interesting for us. Have	ve a nice day! Med vänliga hälsning	gar Thomas Grönvik	

Image 15: An example of data layout shown through mobile application.

Desktop CRM user adds or modifies an existing sales correspondence. He can remove correspondence which he created. He can browse through all the correspondence or look at it contextually.

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_Grönvik.pdf	Dear Thomas, recently I wrote you a letter about counsulting 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 management solution with Project Tracker tool brings them following benefits: - Leveraging the visibility of projects to regulate more efficiently. • Complete resource allocation to decrease duplication and save time and money. • Structure and control to help stay on schedule. • Retention of best practices to determine methodologies that are successful. • Instari information and reports that can export to Excel. Power Point and more. • Role based options to provide accountability and security. I am certain that talking to us would be beneficial to you and your customers. We are

Image 16: Reviewing the CRM correspondence through Desktop application

Similarly the same data can be displayed on mobile device. User can choose between all or filtered correspondence.

Correspondence - Do	ocument Q
Second Se	Marko Hren 18.11.2015 10:10:56 Document Dear Thomas, recently I wrote you a letter about counsulting opportunities in the area of project tracking (see attached). What se
Document	
Email	
Presentation	

Image 17: Contextual view of sales correspondence displayed on mobile device

Based on the application settings an iDMS developer can enable mobile users to add new correspondence records.

ONTACT Qualified / Postponed			Edit		
				Add correspondence	
Lead					
Name / Surname	Mr. Thomas Grönvik	Position	CEO		
Company	Fortunat AB	Address	Brunnse	gatan 89	
Zip / City	SE-824 26 Hudiksvall	Country	Sweder	1	
E-mail	thomas.gronvik@fortunat.se	Web address	http://www.fortunat.se		
No. of employees	35	Comment			

Image 18: An example of adding new correspondence record on mobile device

By opening a correspondence record its data is fully displayed in IBM Notes Desktop version of the application together with any attached content.

File Edit View Create Actions Tools Window Help	
Open 🦆 📵 IMiS/iDMS Sample CRM application 🛪 📴 Contact 🗴 📴 Corres	pondence ×
2 - 🖯 🕲 🗞 🐐 🖆 👆 👄 🛤 🖉 🔞	
Close (2)Edit	(Revision history
	<u> </u>
CORRESPONDENCE 18.11.2015 10:10:56	
Info	
Author: Marko Hren/IMiS	Type: Document
Content	
recently lyrate you a letter about counculting appartunities in the area of project tracking (co	a attached). What gate this solution apart from others is its integration capabilities with amail
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 management solution with Project Tracker tool brings them following • Leveraging the visibility of projects to regulate more efficiently.	benefits:
Complete resource allocation to decrease duplication and save time and money. Structure and control to bein stay on schedule	
Retention of best practices to determine methodologies that are successful.	
Role based options to provide accountability and security.	
I am certain that talking to us would be beneficial to you and your customers. We are master	s in project tracking software, we have experiences in system integration and we have
references. Let me know if your customers would benefit from project tracing solution, so that Best regards.	I can get back to you with more information.
Marko Hren	
Business Development Manager	
E-mail: marko.hren@imis.eu	
Imaging Systems Web: http://www.imis.eu	
IMiS letter_Fortunat_Grönvik.pdf	

Image 19: Sales correspondence review with the option of opening attached content in IBM Notes

Mobile version of CRM application can use the following view to select and display the detailed data of a correspondence record. If there is attached content available, it can be displayed on the mobile device using locally available viewer applications.

Carrier 🗢		3:18 PM				
< Back		ц.				
CORRESPONDENC	CE 18.11.2015 10:10:56	IMiS letter_Fortunat_Grönvik.pdf				
Info						
Author	Marko Hren/IMiS					
Туре	Document					
✓ Content						
recently I wrote you a l its integration capabilit integration provided by improved communicati Integrating your projec - Leveraging the visibil - Complete resource a - Structure and contro - Retention of best pra- - Instant information al - Role based options t I am certain that talkin system integration and with more information. Best regards. Marko Hren Business Development E-mail: marko.hren@in Imaging Systems Web: http://www.imis.e	etter about counsulting opportunities in the area of p ies with email platforms, including Microsoft Outlook or our Web based software offers your strategic Proje- on. t management solution with Project Tracker tool brin ity of projects to regulate more efficiently. Ilocation to decrease duplication and save time and r to help stay on schedule. ctices to determine methodologies that are success ind reports that can export to Excel, Power Point and o provide accountability and security. g to us would be beneficial to you and your customers we have references. Let me know if your customers SManager hs.eu	roject tracking (see attached). What sets this solution apart from others is , Lotus Notes and Web based email systems such as Gmail. The ct management solution unique workflow opportunities as well as gs them following benefits: noney. ful. more. s. We are masters in project tracking software, we have experiences in would benefit from project tracing solution, so that I can get back to you				

Image 20: Sales correspondence review with the option of opening attached content in mobile version of CRM application.

Desktop user can search through indexed metadata using the well-known IBM Notes Search bar.

Print Rew contact				
🔍 Search in View 'Contacts \ By company'				
Search for takok				Search

Image 21: Searching for data using full text index in IBM Notes application

Similarly a mobile user can search through full text index for data using the Search icon.

Carrier ᅙ	3:21 PM	100%
Applications	Contacts by company	Q
📕 By company	Q takok	S Cancel
By owner	Dynamics Australia Australia Raiting: Not qualified, Status: Information	21.000,00 EUR

Image 22: Searching for data using full text index in mobile version of CRM Application

Search results are displayed in IBM Notes view.

😡 IMiS/iDMS Sample CRM app	plication - Contacts \ By compar	y - IBM Lotus Notes							
File Edit View Create A	ctions Tools Window Help								
Open 🤳 🔲 🖪 IMiS/i	iDMS Sample CRM applicat	tion 🗴 🖪 IMiS/iE	MS Sample CRM applicati	on - (×					
🖞 - 号 😂 🍫 🍫	- 🗐 🛱 C 🔞								
IMiS/iDMS Sample CRM application	Print New contact								
	Q 2 results found in 'Co	ntacts \ By company' n	natched your search.				0	Indexed ?	×
🖃 📸 Contacts	Search for takok				Se	earch	Clear Results	<> More	
By company	Company	Country	Owner	Products	Deal value	Curr.	Rating	Status	
by owner	Takok Bank Sh.A.	Albania	Sales person 3	Project. Track. Server Project. Desktop. Client Project. Web. Client Project. Mobile. Client Project. Connector Project. Track. Services	40.000,00	EUR	Qualified	Presentation	
	Upside GmbH	Schweitz	Business partner	Project.Track.Server Project.Mobile.Client Project.Connector	7.100,00	EUR	Qualified	Negotiation	
IMAGING SYSTEMS									
1 document selected									
SYSTEMS									
1 document selected									

Image 23: Search results display in IBM Notes application

The same results are displayed in mobile version also



Image 24: Search results display in mobile version of CRM application

CONTACT Qualified / Presentation			
Lead			
Name / Sumame:	Mr. Enkelejd Bakalli	Position:	Head of Central Operations Department
Company:	Takok Bank Sh.A.	Address:	European Trade Center, Bulevardi "Bajram Curri"
Zip / City	Tirana	Country:	Albania
E-mail:	enkelejd.bakalli@takokbank.al	Web address:	http://www.takokbank.al
No. of employees:	1280	Comment:	Mr. Bakalli is big influencer
Source			
Source:	Existing customer	Detail:	Implemented Project tracking system in Takok bank, Slovenia



Carrier ᅙ		3:57 PM	100%
〈 Contacts by com	pany [takok]		•••
CONTACT Qualif	ied / Presentation		C)
Lead			
Name / Surname	Mr. Enkelejd Bakalli	Position	Head of Central Operations Department
Company	Takok Bank Sh.A.	Address	European Trade Center, Bulevardi "Bajram Curri"
Zip / City	Tirana	Country	Albania
E-mail	enkelejd.bakalli@takokbank.al	Web address	http://www.takokbank.al
No. of employees	1280	Comment	Mr. Bakalli is big influencer

Image 26: The source of full text search hit in mobile version of CRM application

5 ADMINISTRATION

5.1 General

The administration interface IMiS®/iDMS Service is intended for system configuration. This chapter covers the following topics:

- administration interface generation,
- administration interface view,
- administration interface document actions,
- administration interface access rights.

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 »@DocumentUniquelD« function. Keep in mind that when copying documents from one database to another through clipboard, the document id changes, but the content of the »id« field remains the same as it is the base for connecting.

5.2 Administration interface generation

The IMiS[®]/iDMS Service database is generated from the sample »iDMS Service« database. The database is generated on an IBM Domino server, where we can access application databases that we reference in the administration interface. Usually, we 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 *<u>chapter 5.4 Administration interface</u>* <u>access rights</u>.

5.3 Administration interface view

Place a search icon representing administration interface on a worksheet.



Image 27: iDMS Service icon

iDMS Service 1.1.1511.1 - Datasets - IBM Lotus Notes - • • <u>File Edit View Create Actions Tools Window Help</u> Open 퉞 🕒 🚰 Home × 🗰 Workspace × 🔹 iDMS Service 1.1.1511.1 - Datasets i 🔁 - 吕 🕲 🍫 🦘 🖘 🖘 🖬 🛤 😅 🐻 i 🏠 🕋 🗖 i 🥐 i 🐽 1 . . iDMS Service 1.1.1511.1 Print New dataset ۲ â Name Description / DATASET_CRM_contactsByCompany 2 Contacts by company DATASET_CRM_contactsByOwner DATASET_CRM_EV_CorrespondenceAll Contacts by owne 📇 Configurations -18 Correspondence All Datasets DATASET_CRM_EV_CorrespondenceByTypeDocume Correspondence by type Documer Ø Datasources DATASET CRM EV CorrespondenceBvTvpeEmail Correspondence by type email Sections DATASET_CRM_EV_CorrespondenceByTypePhoneCall Correspondence by type phone call DATASET_CRM_EV_CorrespondenceByTypePresentation Correspondence by type presentation Actions Document types IMAGING SYSTEMS 1 document selected . Online -

The basic administration interface appears on the screen:

Image 28: Administration interface view

The navigator allows you to select index.

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

[Datasets] Configuration documents that specify document lists.

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

[Sections] Sections you reference in various configuration documents.

[Actions] Specifying document actions.

[Log events] Errors and warnings during operation running.

5.4 Administration interface access rights

The application recognizes three (3) user types:

- Settings viewers.
- Settings editors.

• Administrators.

For <u>settings viewers</u>, reader access rights suffice.

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

<u>Settings editors</u> require at least database editing rights. The concept of author fields is not supported, so copyrights do not suffice.

Administrators require 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«.

Access Control L	List to: iDMS Service 1.1.1511.1	? ×			
Basics Roles C Log Advanced	Administration server None Server IMiSDev/IMiS Action Do not modify Names fields	snin			
	This database's Access Control List will automatically be updated when the Administration Process is run on the server chosen above. See Help for more information. Enforce a consistent Access Control List across all replicas Enabling 'Enforce a consistent Access Control List across all replicas' will ensure that an ACL remains identical on all Notes database replicas.				
Last change: J According to: I	Maximum Internet name and password Reader Look Up User Types for 'Unspecified' Users Pressing this button will perform a Domino Directory lookup for each user in the Access Control List v listed as an 'Unspecified' user type. If the name is found, the appropriate user type (e.g. Server, Persetc.) will be set in the ACL. Janez Kogovsek on 30.11.2015 08:47:28 OK Cancel	who is son,			

Image 29: Establishing access level in »Maximum Internet name and password«

Besides creating configuration documents, this database is intended for request implementation 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 implementation. 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 30: Web service provider »Service«



Image 31: Specifying user context

5.5 Administration interface actions

Index 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|datasorce|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 and if the user has full editing rights in the database.

[Save] Saving the settings of the current document.

The action is available in corrective mode.

[Close] Closing the current document.

6 CONFIGURATION

6.1 »CONFIGURATIONS«

The Configurations section deals with configurations that define the appearance of an

application on a mobile device.

w iDMS Service 1.1.15111 - Configuration - IBM Lotus Notes							
Open 🗓 🕞 🥂 Home × 🛗 Workspace × 🔹 iDMS Service 1.1.1511.1 - Configurat ×							
1 2 - 2 3 3 3	A C D	🏡 💼 🗔 🥜 (iDMS Service 1.1.1511.1	- Configuration		🛛 🔹 🔹 Search iDMS Servio	ie 1 🔍	
iDMS Service	1 Print 2 New cor	figuration					
	Name	Description ^	Generation ^	Version ~			
Configurations	Tablets on IUS 7.	X & 8. & 9. App Portal configuration - IUS - tablet	8 1	U		- 🔤	
Datasets							
Datasources						<u>♥</u>	
E Sections							
Actions							
Document types							
IMAGING SYSTEMS							
1 document selected	•			*		online *	

Image 32: View of the »Sections« 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 and connects to a mobile device type.

IMiS®/iDMS Man	iual		version 1.1.1511
CONFIGURATION			IMAGING SYSTEMS
Basic information			
Name:	Tablets on iOS 7.*.x & 8.* & 9.*	Description:	App Portal configuration - iOS - tablets
Generation:	1	Version:	0
Device version:	•	Platform version:	iPhone OS 7.* iPhone OS 8.* iPhone OS 9.*
Traffic disposition:	GZip compressed		

Image 33: View of settings in the »Basic information« header

[Name] Name of configuration. Data is required.

[Description] Description 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.

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

[Device version] Mobile application version for which the configuration is valid. Syntax that is accepted by the *»@Matches«* function is allowed. Data is required.

[Platform version] Operation system of a mobile device for which the configuration is valid. Syntax that is accepted by the *»@Matches«* function is allowed. Data is required.

[Traffic disposition] Mode of data forwarding to a mobile device. *»Normal«* and *»GZip compressed«* are the available options. *»GZip compression«* is used in data sharing.

The *»Normal«* option is typically used in a development and testing phase, when we are still 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.

6.1.2 Configuration

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

figuration	1
nfig>	-
<transport timeout="30"></transport>	
<pre><session timeout="10005"></session></pre>	
<resbundle locale="en-US"></resbundle>	
<pre><image id="LOGO-PORTAL"/></pre>	
<body>iVBORw0KGgoAAAANS</body>	SUhEUgAAAKYAAAA1CAYAAADIrJIBAAAAGXRFWHRTb27
WFnZVJ1YWR5cc11PAAAAyJpVFh0WE1MOmNvbS5hZ	ZG9iZS54bXAAAAAAADw/eHBhY2t1dCBiZWdp
j0i77u/IiBpZD0iVzVNME1wQ2VoaUh6cmVTek5UY	Y3prYzlkIj8+IDx40nhtcG11dGEgeG1sbnM6
D0iYWRvYmU6bnM6bWV0YS8iIHg6eG1wdGs9IkFkb	b2JlIFhNUCBDb3JlIDUuMy1jMDExIDY2LjE0
TY2MSwgMjAxMi8wMi8wNi0xNDo1NjoyNyAgICAgI	ICAgIj4gPHJkZjpSREYgeG1sbnM6cmRmPSJo
HRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZ	Zi1zeW50YXgtbnMjIj4gPHJkZjpEZXNjcmlw
GlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wPSJod	dHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvf
iB4bWxuczp4bXBNTT0iaHR0cDovL25zLmFkb2J11	LmNvbS94YXAvMS4wL21tLyIgeG1sbnM6c3RS
WYOTH NOW AND A COMPANY AND A COMPANY AND A COMPANY	CO-UUL ZCOCZYN W T- ZU TI Z- M- TU- + - D- D

Image 34: 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 Definition in XML

```
<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>
</reshundle>
<page id="portal" initial="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" 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"</pre>
target="TABLE CRM contactsByCompany" context=""/>
   <item icon="NAVICON-ENVELOPE" caption="Contacts by owner"</pre>
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"</pre>
tableTitle="Contacts by company" ...>
</viewTable>
<viewTable id="TABLE CRM contactsByOwner" source="DATASET CRM contactsByOwner"</pre>
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"</pre>
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%">
   <wraper id=" VIEW CRM EV contact" target="VIEW_CRM_EV_contact"/>
   </col>
</section>
</config>
```

6.1.2.2 Structure description of an XML document

6.1.2.2.1 Session

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

Attribute description:

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

6.1.2.2.2 Transport

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

Attribute description:

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

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.

6.1.2.2.4 Image

Locally defined binary graphical resource encoded in base64 format:

Remote binary graphical resource accessible through its URL:

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

6.1.2.2.5 String

Localized string of characters:

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

6.1.2.2.6 The Page

Page or portal is the starting point of navigation.

The following elements are used for specifying:

- Page
- Page item



Image 35: XML document structure for page and item display

6.1.2.2.6.1 The »page« element

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

- id* [string]: (default: false) element id.
- initial [boolean]: (default: false) whether it is the first page after login window.
- icon [string]: (default: "") image id in the upper right of the page.
- titleLabel [string]: (default: "") page title in the upper centre of the page.
- titleFontSize [unsignedInt]: (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).

6.1.2.2.6.2 The »item« element

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 that is shown if selected.
- context [string]: (default: "") context that is sent unchanged at data request.
- string content [string]: localized id string or string that is shown as the element's subtitle (text under item).

6.1.2.2.7 View

View consists of navigation and content.

Specifying includes the following elements:

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

Navigation table viewNav	Navigation menu element	Content viewTable	View	Content table element
Carrier 穼		3:16 PM		100%
	Contac	cts by company	· ·	<u> </u>
🛄 By conipany	Dynamics Australia	a 💛		21.000,00 EUR
上 By owner 📕	Australia Raiting: Not qualified, Statu	is: Information		
	Ecco Software Pty VIC, Australia Raiting: Not qualified, Statu	Ltd is: New		8.500,00 EUR
•	Ekrem Systems Lto United Kingdom Raiting: Qualified, Status: F	1. resentation		6.900,00 EUR
	Exito Consulting A Norway Raiting: Not qualified, Statu	S is: Information		12.500,00 EUR
	Fortunat AB Sweden Raiting: Qualified, Status: F	ostponed		6.700,00 EUR
	KM Bilgisayar Yazıl TÜRKİYE Raiting: Not qualified, Statu	ımları A.Ş. Is: New		14.000,00 EUR
	Kopela Oy Finland Raiting: Not qualified, Statu	is: Lost		17.000,00 EUR
	Ligo Teknoloji Ltd. TÜRKİYE Raiting: Qualified, Status: F	Şti.		42.000,00 EUR
	Multiproject d.o.o.			16.000,00 EUR

Image 36: XML document structure for specifying navigation table, menu and content

Navigation menu element:

lcon	Label

Navigation table element:

	Title	Note
lcon	Subtitle	
10011	Text	

6.1.2.2.7.1 The »view« element

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

```
<view id ="SingleView ID" initial="true/false" source="String"
navigator="navigation ID" table="table ID" titleFontSize="number"
titleFontStyle="N/B/I" titleFontColor="[0-255],[0-255],[0-255]"
highlightColorTop="[0-255],[0-255],[0-255]" highlightColorBottom="[0-255],[0-255]" />
```

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

- id* [string]: element id.
- initial [boolean]: (default: false) whether it is the first page after login window.
- source [string]: dataset id (service data source).
- navigator* [string]: navigation menu id.
- table [string]: content table id.
- titleFontSize [unsignedInt]: (default: 20) title font size in display in pixels.
- titleFontStyle [char]: (default: N) title font style in display
 - N: regular
 - B: bold
 - I: italics.
- titleFontColor [string]: (default: 150,150,150) font colour in RGB (e.g. 250, 244 ,23).
- highlightColorTop [string]: (default: 0,0,0) top gradient colour of the title bar in RGB (e.g. 250, 244, 23).
- highlightColorBottom [string]: (default: 0,0,0) lower gradient colour of the title bar in RGB (e.g. 250, 244, 23).

6.1.2.2.7.2 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"
highlighted="true/false" highlightColorTop="[0-255],[0-255],[0-255]"
highlightColorBottom="[0-255],[0-255],[0-255]" width="size in pt"
cellHeight="size in pt"
labelFontColor="[0-255],[0-255],[0-255]" labelHighlightFontColor=
"[0-255],[0-255],[0-255]" labelLines="number of lines"" labelJust="L/C/R"
labelFontSize="size in points" labelFontStyle="N/B/I" labelOffsetLeft="number"
conOffsetLeft="number" >
    <item icon="icon id" caption="text" target="table Id" context=""
default="true/false" />
    <item icon="icon id" caption="item2.1" default="true">
        <item icon="icon id" caption="item2.1" default="true">
        <item icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1" default="true">
        </tem icon="icon id" caption="item2.1.1" target="table ID"
</pre>
```

</item> </viewNav>

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 possible).
- collapse [boolean]: (default: true) navigator dynamics based on device orientation
 - true: navigation menu hides in portrait mode
 - false: navigation menu does not hide.
- highlighted [boolean]: (default: true) emphasis of selected cells
 - true
 - false.
- highlightColorTop [string]: (default: 0,0,0) upper gradient color of cell enhancement in RGB (e.g.: 250, 244, 23).
- highlightColorBottom [string]: (default: 0,0,0) lower gradient color of cell enhancement in RGB (e.g.: 250, 244, 23).
- width [unsignedInt]: (default: 320) menu width in pixels.
- cellHeight [unsignedInt]: (default: 40) menu element height in pixels.
- labelFontColor [string]: (default: 150,150,150) font color of the menu element label in RGB (e.g.: 250, 244, 23).
- labelHighlightFontColor [string]: (default: 150,150,150) label font color when emphasizing in RGB (e.g. 250, 244, 23).
- labelLines [unsignedInt]: (default: 0) number of lines for label element text display.
- labelJust [char]: (default: L) text position in label
 - L: left alignment
 - C: center alignment
 - R: right alignment.
- labelFontSize [unsignedInt]: (default: 20) label font size in pixels.
- labelFontStyle [char]: (default: N) label font style
 - N: regular
 - B: bold
 - I: italics.
- labelOffsetLeft [unsignedInt]: (default: 0) left offset of label element in pixels.

• iconOffsetLeft [unsignedInt]: (default: 0) left offset of image in pixels.

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) or the cell represents the first selected element on the navigation menu. In case of several default="true" attributes, choose the first one.

6.1.2.2.7.3 The »viewTable« element

It represents a set of »document stub« elements with basic data on each document.

```
<viewTable id="table id" source="dataset ID" marginLeft="pt" marginRight="pt"</pre>
 marginTop="pt" marginBottom="pt" cellHeight="pt" highlighted="true/false"
 dataOffsetLeft="pt/%" dataOffsetRight="pt/%" iconOffsetLeft="pt"
 highlightedTextColor="[0-255], [0-255], [0-255]" tableTitle="text"
  titleLines="number of lines"
  titleHeight="pt" titleJust="L/C/R" titleFontSize="number" titleFontStyle="N/B/I"
  titleFontColor="[0-255],[0-255], [0-255]" subTitleLines="number of lines"
  subTitleHeight="pt" subTitleJust="L/C/R" subTitleFontSize="number"
  subTitleFontStyle="N/B/I" subTitleFontColor="[0-255],[0-255]"
noteWidth="pt/%"
 noteHeight="pt" noteLines="number of lines" noteJust="L/C/R"
noteFontSize="number"
 noteFontStyle="N/B/I" noteFontColor="[0-255],[0-255], [0-255]" textLines="number
of lines"
  textHeight="number" textJust="L/C/R" textFontSize="number" textFontStyle="N/B/I"
  textFontColor="[0-255],[0-255],[0-255]" />
```

The »viewTable« attribute description (* marks required attributes):

- id* [string]: table identifier.
- source* [string]: dataset identifier as registered in service.
- marginLeft [unsignedInt]: (default: 0) left 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.
- marginBottom [unsignedInt]: (default: 0) bottom offset of the »view« table in pixels.
- cellHeight [unsignedInt]: (default: 40) cell height in pixels.
- highlighted [boolean]: (default: true) cell highlighting when selected

- true
- false.
- 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.
- highlightedTextColor [string]: (default: 0,0,0) highlighted cell text color in RGB (e.g. 250, 244, 23).
- tableTitle [string]: (default: "") the table title is shown in the middle of the title bar/section when the table is shown.
- titleLines [unsignedInt]: (default: 0) number of lines for the title of the »document stub« in a cell.
- titleHeight [unsignedInt]: title height in a cell in pixels.
- titleJust [char]: (default: L) text position in a cell title
 - L : left alignment
 - C: center alignment
 - R: right alignment.
- titleFontSize [unsignedInt]: (default: 20) title font size 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.
- subTitleHeight [unsignedInt]: 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.
- subTitleFontSize [unsignedInt]: (default: 20) subtitle font size in pixels.
- subTitleFontStyle [char]: (default: N) subtitle font style
 - N: regular
 - B: bold
 - I: italics.

- subTitleFontColor [string]: (default: 0,0,0) font color in RGB (e.g. 250, 244, 23).
- 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]: label height in a 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).

6.1.2.2.8 Document

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

Docun heac	nent Jer	Section header		Section	Document Doc
Contacts by com	pany ied / Postponed				<u> </u>
Lead		V			
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.s	ie .
No. of employees	35		Comment		

Image 37: XML document structure for determining display of document sections

Document header:

title	id	status	icon
created		author	

```
<doc id="Document ID" icon="icon ID"
```

```
headerBackgroundColorTop="[0-255],[0-255],[0-255]"
headerBackgroundColorBottom="[0-255],[0-255], [0-255]" headerHeight="pt"
sectionsOffset="pt" borderOffset="pt"
titleField="title" titleHeight="pt" titleJust="L/C/R" titleFontSize="number"
titleFontStyle="N/B/I" titleFontColor="[0-255],[0-255],[0-255]"
idField="idField" idHeight="pt" idJust="L/C/R" idFontSize="number"
idFontStyle="N/B/I" idFontColor="[0-255],[0-255],[0-255]"
createdField="created" createdHeight="pt" createdJust="L/C/R"
createdFontSize="number" createdFontStyle="N/B/I"
createdFontColor="[0-255],[0-255],[0-255]"
statusField="status" statusHeight="pt" statusJust="L/C/R"
statusFontSize="number" statusFontStyle="N/B/I"
statusFontColor="[0-255],[0-255],[0-255]"
authorField="author" authorLabel="text" authorHeight="pt" authorJust="L/C/R" authorField="author" authorLabel="text" authorHeight="pt" authorJust="L/C/R" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorField="text" authorFie
authorFontSize="number" authorFontStyle="N/B/I"
authorFontColor="[0-255],[0-255],[0-255]">
        <section id="section ID" state="C/E/F"
        headerBackgroundColorTop="[0-255],[0-255],[0-255]"
        headerBackgroundColorBottom="[0-255],[0-255],[0-255]"
```

```
title="text" titleFontSize="number" titleFontStyle="N/B/I"
titleFontColor="[0-255],[0-255],[0-255]" titleJust="L/C/R"
labelJust="L/C/R" labelFontSize="number" labelFontStyle="N/B/I"
labelFontColor="[0-255],[0-255],[0-255]"
valueJust="L/C/R" valueFontSize="number" valueFontStyle="N/B/I"
valueFontColor="[0-255],[0-255],[0-255]"/>
```

</doc>

6.1.2.2.8.1 The »doc« section

The »doc« attribute description (* marks required attributes):

- id* [string]: document identifier.
- headerBackgroundColorTop [string]: (default: 0,0,0) top gradient color of document header in RGB (e.g. 250, 244, 23).
- headerBackgroundColorBottom [string]: (default: 0,0,0) bottom gradient color of document header in RGB (e.g. 250, 244, 23).
- headerHeight [unsignedInt]: (default: 60) document header height in pixels.
- sectionsOffset [unsignedInt]: (default: 0) offset of sections in pixels.
- borderOffset [unsignedInt]: (default: 0) border offset in pixels.
- titleField* [string]: field identifier of document title.
- titleHeight [unsignedInt]: (default: 20) height in pixels of document title.
- titlelJust [chair]: (default: L) text position in a document title
 - L : left alignment
 - C: center alignment
 - R : right alignment.
- titlelFontSize [unsignedInt]: (default: 20) font size in document title in pixels.
- titlelFontStyle [chair]: (default: N) font style of document title
 - N (default) : regular
 - B: bold
 - I: italics.
- titleFontColor [string]: (default: 0,0,0) font color of document title in RGB (e.g. 250, 244, 23).
- idField : [string]: the »id« field identifier (document id).
- idHeight [unsignedInt]: (default: 20) height of the »id« field in pixels.
- idJust [char]: (default: L) text position in the »id« field

- L : left alignment
- C : center alignment
- R : right alignment.
- idFontSize [unsignedInt]: (default: 20) font size of the »id« field.
- idFontStyle [char]: (default: N) font style in the »id« field
 - N: regular
 - B : bold
 - I : italics.
- idFontColor [string]: (default: 0,0,0) font color in the »id« field in RGB (e.g. 250, 244, 23).
- createdField [string]: identifier of the »created« field (the date the document was created).
- createdHeight [unsignedInt]: (default: 20) height of the »created« field in pixels.
- createdJust [char]: (default: L) text position in the »created« field
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- createdFontSize [unsignedInt]: (default: 20) font size in the »created« field.
- createdFontStyle [char]: (default: N) font style in the »created« field
 - N: regular
 - B: bold
 - I: italics.
- createdFontColor [string]: (default: 0,0,0) font color in the »created« field in RGB (e.g., 250, 244, 23).
- statusField [string]: identifier of the »status« field (current status of document).
- statusHeight [unsignedInt]: (default: 20) height of the »status« field in pixels.
- statusJust [char]: (default: L) text position in the »status« field
 - L: left alignment
 - C : center alignment
 - R : right alignment.
- statusFontSize [unsignedInt]: (default: 20) font size in the »status« field.
- statusFontStyle [char]: (default: N) font style in the »status« field
 - N : regular
 - B : bold

- I : italics.
- statusFontColor [string]: (default: 0,0,0) font color in RGB (e.g. 250, 244, 23).
- authorField [string]: identifier of the »author« field (author of the document).
- authorHeight [unsignedInt]: height of the »author« field in pixels.
- authorJust [char]: (default: L) text position in the »author« field
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- authorFontSize [unsignedInt]: (default: 20) font size in the »author« field.
- authorFontStyle [char]: (default: N) font style in the »author« field
 - N : regular
 - B: bold
 - I: italics.
- authorFontColor [string]: (default: 0,0,0) font color in the »author« field in RGB (e.g. 250, 244, 23).
- icon [string]: (default:"") identifier of the »icon« field (document logo).

Description of the »section« attributes (* marks required attributes):

- id* [string]: section identifier.
- state* [char]: initial state of section
 - C collapse: closed section, enhancement/closing options
 - E expanded: open section, enhancement/closing options
 - F fix: open section, no enhancement/closing options.
- headerBackgroundColorTop [string]: (default: 0,0,0) top gradient colour of section header in RGB (e.g. 250, 244, 23).
- headerBackgroundColorBottom [string]: (default: 0,0,0) bottom gradient colour of section header in RGB (e.g. 250, 244, 23).
- headerHeight [unsignedInt]: (default: 40) height of section header.
- height [unsignedInt]: (default: 200) section height (in case of »wrapper«, the value is used for height of container).
- title [string]: (default: "") section title.
- titlelJust [char]: (default: L) text position in section title
 - L : left alignment
 - C : center alignment

- R : right alignment.
- titlelFontSize [unsignedInt]: (default: 20) font size in section title.
- titlelFontStyle [char]: (default: N) font style in section title
 - N : regular
 - B : bold
 - I : italics.
- titleFontColor [string]: (default: 0,0,0) font color in section title in RGB (e.g. 250, 244, 23).
- labelJust [char]: (default: L) label text position in section
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- labelFontSize [unsignedInt]: (default: 15) label font size in section.
- labelFontStyle [char]: (default: N) font style
 - N: regular
 - B: bold
 - I: italics.
- labelFontColor [string]: (default: 0,0,0) label font color in section in RGB (e.g. 250, 244, 23).
- valueJust [char]: (default: L) position of value text in section
 - L : left alignment
 - C : center alignment
 - R : right alignment.
- valueFontSize [unsignedInt]: (default: 15) font size of value in section.
- valueFontStyle [char]: (default: N) font style
 - N: regular
 - B: bold
 - I: italics.
- valueFontColor [string]: (default: 0,0,0) font color of value in section in RGB (e.g. 250, 244, 23).

6.1.2.2.8.2 The »section« section

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

	contentOffset	columr	nOffset	conter	nt rowOffset
Lead					
Name / Surname	Mr. Thomas Grönvik		Position	CEO	
Company	Fortunat AB		Address	Brunnsgatar	n 89
Zip / City	SE-824 26 Hudiksvall		Country	Sweden	
E-mail	thomas.gronvik@fortunat.se		Web address	http://www.f	ortunat.se
No. of employees	35		Comment		

Image 38: XML document structure for specifying individual sections

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

Section - »section«

Attribute description (* marks required attributes):

- id* [string]: section identifier.
- type* [char]: section type
 - T-table: section that consists of tables
 - W-wrapper: section that includes form.
- 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.

Column – »col«

Attribute description (* marks required attributes):

- labelWidth [unsignedInt/string]: (default: 0) label width in section:
 - pt (e.g. "20") : fixed width in pixels
 - % (e.g. "15%") : width in percentage of content area width
 - valueWidth [unsignedInt/string]: (default: 0) value width in section
 - pt (e.g. "20") : fixed offset in pixels
 - % (e.g. "15%") : offset in percentage of section width.

Field - »field«

Valid for sectionType "T", represents a field in a section table can be multivalued.

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. 2013-04-13)
 - T time (e.g. 11:31:04)
 - DT date time (e.g. 2013-04-13T09:31:20+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).

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

Wrapper - »wrapper«

Valid for sectionType "W".

Attribute description (* marks required attributes):

- id* [string]: container id (wrapper)
- target* [string]: id of the contained form.

6.2 »DATASETS«

The section Datasets deals with configurations that define document sets.



Image 39: View of the »Datasets« section

Document fields are divided into the following sets:

- Basic information.
- Source.
- Execute.
- Data source.
- Source options.
- Data.
- Sections.

6.2.1 Basic information

The »Basic information« header specifies a name for a document set and connects to a configuration.

Image 40: View of settings in the »Basic information« header

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

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

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

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

6.2.2 Source

The »Source« header specifies the source of a document set.

Source			
Source type:	View	Max collection size	100
Database:	IMiSDev/IMiS dev\imis\idmscrm.nsf	View name:	ContactsByCompany

Image 41: View of settings in »Source« header

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

Choose the »View« option if you have an index of selected documents available. Efficiency-wise, this option is the best as there is no need for document search. The service uses the existing index.

Choose the »Database search« option if index is not available or if there is some other dynamic condition. (e.g., using the »@Today« function). Just as with the »View« option, you are 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. For more information on the prescribed interface, see <u>chapter 6.2.3 Execute</u> and <u>chapter 6.2.8 Logic implementation for</u> <u>document search</u>. Data is required.

[Max collection size] The highest number of documents in a set. For efficiency reasons, the number should be more than 5000. Data is required.

[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.

[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.

6.2.3 Execute

The »Execute« header specifies an interface for document set retrieval if document source type is »Custom«.

Execute			
Database:	IMiSDev/IMiS dev\imis\idmscrm.nsf	Agent name:	(getCollection)
Get collection database context: <@>	@UserName	Execute action database context: <@>	

Image 42: View of settings in the »Execute« header

[Database] A database with an agent for document set retrieval.

Data is required.

[Agent name] Name of the agent for document set retrieval. Data is required.

[Get collection database context <@>] A formula representing context for document set

retrieval. Data is not required.

<u>Example</u>: @UserName.

[Execute action database context <@>] Not in use at the moment, but its use is predicted in the future. Data is not required.

6.2.4 Data source

The »Data source« header specifies data source in case of document opening.

Data source	
Definition: <@> "DATASOURCE_CRM_co	intact"

Image 43: View of settings in »Data source« header

[Definition <@>] Formula for specifying data source in case of document opening. It has to be recalculated for the name of an existing Data source document. Data is required.

6.2.5 Source options

The »Source options« header specifies search options.

Search options				
Allow search types:	Full text search 🗌 Re	esult set search	Relevance score:	Show relevance

Image 44: View of settings in the »Source options« header

[Allow search types] Search types. Options available: »Full text search« and »Result set search«. Choose the »Full text search« option if you want to search the full text. The user enters criteria on a mobile device.

Warning: For greater efficiency, it is advisable to already have an index for full-text database search.

Choose the »Result set search« option if you want to allow editing of search results directly on a mobile device. Data is not required.

[Relevance score] A display of result relevance. If you want to graphically display result frequency, an available option is »Show relevance«. This option is considered only if a document has been found in a full-text search. Data is not required.

6.2.6 Date

The »Data« header specifies document data in the document set view on a mobile device. A document record consists of five (5) parts: title, subtitle, content, note, and icon.

Data			
Title: <@>	company	Note: <@>	@Text (dealValue; "F,2") + " " + currency
Subtitle: <@>	country	lcon: <@>	
Content: <@>	"Raiting: " + rating + ", Status: " + status		

Image 45: 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 bookmark 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, or a blank string if an icon does not come into consideration. Data is required.

6.2.7 Sections

In the »Sections« header, select sections connected to a document set. Actions available: »Add« and »Remove«. Only section types »Actions« and »Dynamic actions« apply.

Sections		
Add		
Name	Description	

Image 46: View of settings in the »Sections« header

6.2.8 Logic implementation for document search

If you choose »Custom« as a document set type, you need to take care of logic implementation for returning the document set.

In the »Execute« partition, specify a database and agent that is contacted in such case.

Service calls the agent and forwards a context document with the following fields: [sourceName] Name of document set.

[sourceDbContext] Possible context for document set extraction that 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] Possible context for the section that is calculated based on field content. [Context <@>] 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] Possible filter for full-text search that should present a valid condition for full-text search. The user enters it on a mobile device.

Service 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 does not apply in case of conditions for full-document search.

6.3 »DATASOURCES«

The Datasources section deals with configurations that specify document content.

😡 iDMS Service 1.1.1511.1 - Dat	tasources - IBM Lotus Notes		
<u>File Edit View Create A</u>	ctions T <u>o</u> ols <u>W</u> indow <u>H</u> elp		
Open 🦆 🕒 🚮 Home	× Workspace × iDMS Service	1.1.1511.1 - Datasources ×	
🖞 + 😂 🥹 🍫 🚸	- 🖬 🛱 🤂 🚺 🟠 🚔 🖬 🔗	et0	🛛 🗯 🔻 Search iDMS Service 1 🔍
iDMS Service	Print 2 New datasource		
	Name	Description ~	ë
	DATASOURCE_CRM_contact	Contact	📓
Configurations	DATASOURCE_CRM_correspondence	Correspondence	
Datasets			(
Datasources			
E Sections			
Actions			
Document types			
IMAGING			
- 3131EM3			
1 document selected			▲ Conline ▲

Image 47: View of the »Datasources« section

Document fields are divided into the following headers:

- Basic information.
- Source.
- Sections.

6.3.1 Basic information

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

IMiS®/iDMS N	lanual			version 1.1.1511
DATASOURCE				
Basic information				
Name:	DATASOURCE_CRM_contact	Description:	Contact	
Assigned configurations:	Tablets on iOS 7.*.x & 8.* & 9.* - 1/0			

Image 48: View of settings in the »Basic information« header

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

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

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

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

6.3.2 Source

The »Source« header specifies the source of document content.

Database: IMISDev/IMIS dev/imis/idmscm.nsf Replica ID: C12				Source
	1257EFF003C002E	Replica ID:	IMiSDev/IMiS dev\imis\idmscm.nsf	Database:

Image 49: View of settings in the »Source« header

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

[Replica ID] An ID database replica that represents the source of document content.

It fills up automatically when a database is chosen.

6.3.3 Sections

In the »Sections« header, select sections connected to document content. Actions available: »Add« (for adding sections) and »Remove« (for removing sections). Sections of all types are applicable.

Sections		
Add 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		



6.4 »SECTIONS«

In the Sections section, we deal with configurations that specify sections intended for multiple use.

😡 iDMS Service 1.1.1511.1 - Sect	tions - IBM Lotus Notes	
<u>F</u> ile <u>E</u> dit <u>V</u> iew <u>C</u> reate <u>A</u> ct	ctions T <u>o</u> ols <u>W</u> indow <u>H</u> elp	
Open 🦆 🔒 👫 Home	× 🛱 Workspace × 🔹 iDMS Service 1.1.1511.1 - Sections ×	
🔁 - 🖨 🔕 🍫 🌴 🚸	= 🖬 🛱 🕑 🔞 1 🏡 📾 🖬 1 ջ 1 🚥	🛚 🗯 🔻 Search iDMS Service 1 🔍
iDMS Service	Print 2 New section	
1.1.1911.1	Name Description ^	📤 🛛
	SECTION_CRM_#common#_History History	🛛 🔊
Configurations	SECTION_CRM_contact_Deal Contact deal	
Datasets	SECTION_CRM_contact_Header Header data	
	SECTION_CRM_contact_Lead Contact lead	
Datasources	SECTION_CRM_contact_Owner Contact owner	
Sections	SECTION_CRM_contact_Source Contact source	
Actions	SECTION_CRM_correspondence_Content Correspondence cont	ent
Document types	SECTION_CRM_correspondence_Header Correspondence head	er i i i i i i i i i i i i i i i i i i i
_	SECTION CRM EV Correspondence All Contact - Correspondence All	ance All
	SECTION CRM_EV_correspondenceBvTypeDocument Correspondence by th	ne document
	SECTION CRM_EV_correspondenceBvTypeEmail Correspondence by type	pe email
	SECTION CRM EV CorrespondenceByTypePhoneCall Correspondence by the	pe phone call
	SECTION_CRM_EV_CorrespondenceByTypePresentation Correspondence by type	pe presentation
	SECTION_CRM_ACT_Add_correspondence	
	SECTION_CRM_ACT_Edit_contact_data	
	SECTION_CRM_ACT_Remove_correspondence	
	SECTION_CRM_#common#_Attachments Attachments	
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1 document selected		🔺 🛹 🖓 Online 🔺

Image 51: View of the »Sections« section

Document fields are divided into the following headers:

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

6.4.1 Basic information

The »Basic information« header specifies a name and type of section.

ion 1.1.1511
IMAGING SYSTEMS

Image 52: View of settings in the »Basic information« header

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

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

[Data type] Type of section. Options available: »Data«, »Dataset«, »Actions«, »Dynamic actions«, »IMiS objects« and »Attachments«. The »Data« option is intended for document data display. The »Dataset« option is applicable if we want to display a document set within a document that is usually connected to the content of the document. The »Actions« option is used for display of predefined action sets, whereas the »Dynamic actions« option is used for display of actions sets and is specified dynamically based on the context of a document. The »IMiS objects« option is intended for display of IMiS® objects on a document, whereas the »Attachments« option is intended for display of document attachments.

Data is required.

6.4.2 Data

The »Data« header specifies a set of display fields if »Data« as a type of section is selected.

Data	i i i i i i i i i i i i i i i i i i i				
No.	Field name	Туре	Display name <@>	Condition <@>	Value <@>
1.	product	String			product
2.	dealValue	String			@Text (dealValue; "F,2") + " " + currency

Image 53: View of settings in the »Data«, »Currency options« and »Keywords options« headers

Specify for each of the fields:

[Field name] Field name. Date is required.

[Field type] Field type. Options available: »String«, »Date«, »Time«,» Date/Time«, »Integer«,

»Double«,» Currency«, »Boolean«, »Keywords« and »Image«. Data is required.

[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.

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

If the field type is »Currency«, we also specify:

[Curreny code <@>] Currency label. Data is required.

If »Keywords« is the field type, also specify:

[Choices <@>] A set of possible values. Synonyms are supported. For example, if »Person|1« is specified in the 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 value can be multivalued. All values are forwarded to a mobile device which takes care of an appropriate display.

6.4.3 Dataset

The »Dataset« header specifies a source of a document set if »Dataset« is the selected section type.

Dataset			
Dataset name:	DATASET_CRM_EV_CorrespondenceAll	Context: <@>	id

Image 54: 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.

6.4.4 General

The »General« header specifies basic data on action sets if »Actions« or »Dynamic actions« are the selected section type.

General			
Display name:	Edit	Action weight: <@>	1

Image 55: View of settings in the »General« header

[Display name] Display name of action sets. Data is required.

[Action weight <@>] »Weight« of action sets that reflects in the position of action sets in the list of action sets if there are more than one action sets. Data is required.

6.4.5 Actions

The »Actions« header specifies display field sets if »Actions« is the selected section type.

Actio	ns		l i i i i i i i i i i i i i i i i i i i		
No.	Name	Condition <@>			
1.	EditClientRating				
2.	EditClientStatus				
3.	EditClientDealValue				

Image 56: View of settings in the »Actions« header

Each action needs specified:

[Name] Action name. All actions are available. Data is required.

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

6.4.6 Interface agents

The »Interface agents« header specifies an interface for action set retrieval if »Dynamic actions« is the document source type. *For more information, see chapter 6.5.5.1 Extraction of dynamic action sets*.

Interface agents			
Database:	IMiSDev/IMiS dev\imis\idmscm.nsf		
Agent name [Get actions]:	GetProcessActions	Agent name [Execute action]:	ExecuteProcessAction

Image 57: View of settings in »Interface agents« header

[Database] Database with the agent for action set retrieval. Data is required.[Agent name [Get actions]] Name of agent for action set retrieval. Data is required.[Agent name [Execute action]] Name of agent for action implementation. Data is required.

6.4.7 Content

The »Content« header specifies data on document content view if »IMiS objects« or »Attachments« is the selected section type.

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

Image 58: View of settings in the »Content« header

[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. Data is not required.

If the condition is not stated, the IMiS® object or attachment is available.

[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.

Data is not required. If the condition is not stated, the IMiS® object or attachment is available.

6.5 »ACTIONS«

In the Actions section, we deal with configurations that specify pre-selected actions.

😡 iDMS Service 1.1.1511.1 - Actions - IBM Lotus Notes										
Eile Edit View Create Actions Tools Window Help										
Open 🗓 💽 🛜 Home 🗴 🗰 Workspace 🗴 🔹 iDMS Service 1.1.1511.1 - Actions 🗴										
iDMS Service 1.1.1511.1	DPrint ONew action									
	Name Description ^									
	ACTION_CRM_Add_Correspondence	🔊 🔊								
Configurations	ACTION_CHM_Edit_Deal_Valu									
E Datasets	ACTION_CHIM_EDIC_UPIER_Fating									
Datasources	ACTION CRM Remove Corresponde									
Final Sections										
Actions										
Document types										
IMACINIC										
- STOTEMO										
1 document selected	•	🗝 🔏 Online 🔸								

Image 59: View of the »Actions« section

Document fields are divided into the following headers:

- Basic information.
- Additional information.
- Execute.
- Parameters.

6.5.1 Basic information

The »Basic information« header specifies the name of action.

ACTION				IMAGING SYSTEMS
Basic information				
Name:	EditClientDealValue		Description:	
Display name:	Deal value			



[Name] Name of action. Data is required.

[Description] Action description. Data is not required.

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

6.5.2 Additional information

The »Additional information« header specifies additional information for action.

Additional information		
onfirmation message:	Options:	Don't close document after action

Image 61: View of settings in the »Additional information« header

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

[Options] Additional options. Data is not required.

Option set:

• the document remains open after action implementation.

6.5.3 Execute

The »Execute« header specifies an interface for action implementation. *For more information,* <u>see chapter 6.5.5.2 Action implementation</u>.

Execute			
Database:	IMiSDev/IMiS dev\imis\idmscm.nsf	Agent name:	iDMSAction

Image 62: View of settings in the »Execute« header

[Database] A database where agent for action implementation is located. Data is required. [Agent name] Name of agent for action implementation. Data is required.

6.5.4 Parameters

The »Parameters« header specifies a field set for action parameters.

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

Image 63: View of settings in the »Parameters« header

For each parameter, specify:

[Name] Name of parameter. Data is required.

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

[Type] Type of parameter. Options available: »String«, »Date«, »Time«,» Date/Time«, »Integer«,

»Double«,» Currency«, »Boolean«, »Keywords« and »Image«. Data is required.

[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.

6.5.5 Action logic implementation

Make a distinction between predetermined and dynamic actions. If possible, use Predetermined actions.

Dynamic actions apply 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, business logic specifies 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 with the required application logic.

Action implementation is in the domain of business logic application, be it a predetermined or dynamic action. In this case, it is also worth considering creating an intermediate database (provider) for requests that specify action sets and are then forwarded to an appropriate application with an appropriate application database.

6.5.5.1 Extraction of dynamic action sets

The »Agent name [Get actions]« partition first specifies a database and an agent that is contacted in such case.

The 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 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.

After receiving a call 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 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 <action number>. [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 implementation. Data is not required. [optons_<i>] Additional options. Data is not required. Option set:

• »1« - the document remains open after action implementation

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

If parameters are anticipated for action, the 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.

6.5.5.2 Action implementation

The »Agent name [Execute action]« partition fist specifies the database and agent that is contacted in such case.

The 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 implementation 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 with extraction of option sets.
[parValue_<jj>] Value of parameter.