

ixi-UMS 7 Business

Installation and Administration English

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1 ixi-UMS Business Overview

ixi-UMS Business is a powerful unified messaging software, that provides services such as Fax, Voice, SMS and mobile access. The ixi-UMS Business **Services** can be combined with each other flexibly. That way, ixi-UMS Business can be applied as pure fax server, for example, or as a complete unified messsaging system with Fax, Voice and SMS.

As it is based on standards, ixi-UMS Business can basically be operated with all the common PBX's (conventional or IP-based).

General Funktion:

ixi-UMS Business is a powerful unified messaging software, that provides services such as Fax, Voice, SMS and mobile access. As it is based on standards, ixi-UMS Business can basically be operated with all the common PBX's (conventional or IP-based).

A professional, server-based Unified Messaging system exists of several components: A phone binding (PBX), the interface between computer and phone system (CAPI), a connection with the mail server (SMTP-Connector) and the mail server. If the system is not connected to a mailserver, the UMS messages are stored in a local database (optional)



The PBX establishes the connection to the telephone network. For the application of ixi-UMS Business any PBX can be used. For ixi-UMS Business, a point-to-point or a point-to-multipoint connecton (ISDN) and also a VoIP conection can be used.

A CAPI that provided by an Remote-LAN Capi from elmeg bintec device or XCAPI module is needed as interface. The Capi is a kind of "translator" between Computer applcation and Remte-Capi/VoIP-Modul.

ixi-UMS Business processes the incomming and outgoing UM messages to get the necessary or desired format.

The SMTP Connector of ixi-UMS Business provide the connection between ixi-UMS Business Server and the mail server used. Also it connects the used LDAP database

The task of the mailserver is to distribute the incomming UM messages re pass the outgoint messages to the ixi-UMS Business Connector

Before outgoing messages can be sent by the ixi-UMS Business Server, they have to be "converted" in a respective format. This process is called "rendering". There are two ways of rendering with ixi-UMS Business:

- server-based rendering
- client-based rendering

Both variants can be combined.

Server-based rendering

With server-based rendering, all the file attachments are processed at a central point (ixi-UMS Business Server Service). For this, the application that shall be sent as fax has to be installed on the respective machine.

For example, if the user attaches a Word file to the fax as an attachment, the mail server, e.g. Microsoft Exchange Server, will transfer it to the ixi-UMS Business server.

On this server the Word file is printed via a special printer "IXIRender". This creates a file that contains a graphic image of the document as well as information such as recipient number.

Client-rendering

Client-rendering means the creation of a fax at the user workstation. For this, "ixi-UMS Business Client Tools" are needed that provide an own printer, amongst others. Via this printer, a fax-capable file can be created out of any application installed.

With this type of rendering, the application is not needed on the server.

1.1 Features

In the following, the services are explained which are installed with the ixi-UMS Business and therewith are available without any additional installation depending on the license.

In the test mode you can test all features and services 45 days.

All the required components are installed in order to run the services

- <u>Fax</u>
- <u>SMS</u>
- <u>Voice</u>
- <u>MWI / Alert</u>
- <u>TTS</u>

1.1.1 Fax

The ixi-UMS Business receives and sends faxes. The faxes are sent to the mail server as PDF-file.

• Sending fax messages

For the user, sending fax messages works like sending e-mails. The only difference is that a different addressing scheme has to be used.

The sending user gets a sending report for every message indicating success or failure (among other information). Like in e-mail messages, the user can specify priorities to influence the order in which messages are sent. Messages will be rendered into the fax format. Attachments will be rendered using a fax printer driver and the corresponding application.

• Inbound routing of fax messages

Fax addresses are assigned to users in the messaging system

• Printing incoming fax messages

Incoming ixi-UMS Fax messages for specified number range or number ranges can also be printed out on a network printer.

1.1.2 SMS

ixi-UMS Business offer SMS dispatch using several providers. To use these services, you must be registered with one of the providers listed who will invoice you for this service.

Fees may vary depending on the provider.

With some providers you have to have a static IP in order to use the service.

Simply compare the various providers and pick out the most favourable one for you. The service User account has to be activated so that a user is able to use the SMS text message dispatch.

Depending on the provider, you can also provide the reply address in the request. In principle, every service provider can be connected if it has a HTTP GET or POST interface.

1.1.3 Voice

ixi-UMS Business contains an answering machine function (Voice-mailbox). The users get one ixi-UMS number and can receive fax-messages and voice-messages. Messages of all types are displayed in the user's Inbox.

If the fax number is not equal to the voice mailbox number, <u>different numbers can be set up to</u> receive fax and voice messages. Depending on the telephone system and connection of ixi-UMS Business, a global voicemail number can also be used by means of "<u>route-by-redirection</u>".

The function "Voice-mailbox" is to be used in 3 authorisation steps:

• Only Voice-mailbox

The user can set up 6 profiles via WebAccess and record a separate, individual announcement per profile, as well as all other profile settings. For example:

- Set up call forwarding
- Activate MWI at the office telephone (optional)
- Set your own office hours to set times for party and break breaks

The message of a caller is recorded and sent to the user assigned to this voice mailbox by e-mail. The user can play the message via a double-click on the PC or forward it as e-mail to his telephone and listen to it there.

• Voice-mailbox with configuration by phone

Like "Voice Mail Only". In addition, the user can call his UMS number and log in using a PIN. He can set up all 6 profiles on the phone and record announcements as well as all other profile settings except:

- Activate MWI at the office telephone (optional)
- Set your own office hours to set times for party and break breaks

• Voice-mailbox with configuration and distant query by phone

Like "Voicemailbox with configuration". In addition, an IMAP4 access is made to the user's mailbox when the user calls his UMS number. If new voice messages or e-mails are in the mailbox, they can:

- Listen to the messages
- callbach the caller
- answer to the message
- Delete the message
- forward the message as an e-mail (internal) or as a voice to a telephone.

Note:

This option is only available when the incomminig UMS messages are sent to a mail server with IMAP4 support.

Globale Announcement

When the user has not deposited an own announcement, the default announcement is played:

Hello, you have reached the voice box <extension>. I am not in the office at the moment. Please leave a message after the tone.

If "<u>Use global announcement</u>" is enabled, one individually recorded announcement can be used, e.g.:

Hello, this is company estos. The desired participant is busy at the moment. Please leave a message.

This announcement is valid until the user has made a separate announcement.

1.1.4 MWI

Depending on the PBX and the respective telephone (e.g. feature-added telephone), the incoming of ixi-UMS messages (faxes, voice mails, SMS) can be signaled at the telephone of the user. This is the so-called feature MWI (Message Waiting Indication).

For switching on the indication at the telephone, the ixi-UMS Business transmits a corresponding signal to the PBX. At last, the MWI is switched on by the PBX.

For switching off the indication at the telephone, a so-called "alert-message" is sent to the ixi-UMS Business Server by the mail client. The ixi-UMS Business Server passes the information on to the PBX. By doing so the PBX is caused to delete the MWI at the respective user's telephone.

For information about the addressing and the format of these alert-message, please have alook at the <u>MWI Signaling</u>. You can also get information about the requirements there.

Information on the format and setting up of this alert message can be found in the manual under "Additional Informations - <u>MWI - Signaling"</u>

1.1.5 TTS

A "text to speech engine" converts text into audio-files . You need this funtion to:

- send text message, which are read out to the called participant.
- listen to E-Mails
- to create greetings for the answering machine

For this function "TTS-Engine" from Microsoft for the languages German, English, Italian and Dutch are installed. However, any other "MS Speech" based TTS engine can also be installed and used.

1.1.6 Journaling

Every inbound and outbound transmission will be logged to the journal database. Detailed reports can be generated.

ixi-	UN	IS	7 Bu	isines	s Config	guration			en	Logout
Со	nfigu	irat	ion	User Mai	nagement	Monitoring				
Lin	es	Q	ueue	Journa	Services	5 Logging	About			
Jo	urnal									😮 Help
Į	50 Ent	ries	per page	e 🗸 all	entries ~	Refresh			Search	
≓	0 ®\$ 0	0	Transmi	ssion time 🗸	Sender Number \$	Recipient Num	iber 🗘 🛛 Subject 🗘	E-Mail Addre	ss 0	
÷	0	×	12.8.202	0 8:52:53	+49 30 789544565	54 48388456	Important - ple	ase verify frank.smith@	domain.net	Show details
\rightarrow	⊫	~	12.8.202	0 8:24:54	+49308956487541	154 +49 30 456785	651 -	John.McMan	ow@domain	Show details
\rightarrow	4)	~	12.8.202	0 8:14:52	+49815136856177	7 +49 30 456785	651 -	John.McMan	ow@domain	Show details
\leftarrow	(B)	~	12.8.2020	0 8:09:56	+49 30 456785654	4 +49151667561	57 Important Infor	rmation samantha.fill	y@domain.net	Show details
\rightarrow	\$	~	12.8.202	0 8:23:45	+49815136856177	7 +49 30 456785	651 -	-		Show details
÷	1	~	12.8.202	0 8:24:54	+49308956487541	154 +49 30 456785	651 Order via Fax	John.McMari	ow@domain	Show details

The journal entries are stored in an SQL-based database and can <u>easily be exported</u> to process the information further.

1.1.7 Sender Identification

The sender number is resolved via an LDAP-query to the MetaDirectory. As a result, not the sender number but the name is displayed at the user in the inbound message, and city, company, etc. are displayed in the subject.

The mail body displays various sender information read from the MetaDirectory.

Outlook Web App	
Mail > Posteingang 1	1 Items
Karin Sandmann	New - Delete - Move - Filter - View - Today
🖻 Mail	Fax from: Customer AG / Downtown, +391304567899745 Smith www.customer.de
Calendar Contacts Tasks	Caller Address: +3496 Sender Station ID: +49 8142 47993496 Called Address: +49814247995578 Receipt time: 08:09:40 04.12.2015 Pages: 2
 Public Folders Contacts Tasks Public Folders 	Sender information Name: www.customer.de Last name: Smith Company: Customer AG E-Mail: Martin.Smith@customer.de Phone number: +39130456789745 Mobile number: +394569745146
	Fax number: +391304567899745

After having activated the feature, the following data are displayed, provided that the resolution was successful:

Example:

From:	Display name	From:	Klaus Meier
Subject:	Service from Company / City	Subject:	Fax from Business AG / Olching
Body:	Name	Body:	Name: Klaus Meier
	Company		Company: Business AG
	E-mail		E-mail: Meier@Business.de
	Phone number		Phone number: +49814247990
	Fax number		Fax number:
	Mobile number		Mobile number:

Required for the ixi-UMS Business Sender Identification is the installation of the MetaDirectory. This feature is liable to costs.

1.1.8 Using without mail system

If no mailserver is available, all incoming ixi-UMS Messages and confirmations can be stored in the local database. In this case, the users can access all ixi-UMS Messages and confirmations only via <u>ixi-UMS Web Journal</u>. The available functions and the required configuration for the ixi-UMS Business is dependent on this specification.

For exaple, the options "<u>Sender Identification</u>" and "<u>Remote Inquiry of the Voice Mailbox by Phone</u>" are not available and are deactivated.

1.1.9 ixi-UMS Business Portal

ixi-UMS Business offers some browser-based pages for users to make settings or to get an overview of the sent and received UMS messages.

Webseite	Funktion
ixi-UMS Web Journal	offers every user a browser-based view of his own UMS messages
ixi-UMS Voice-Mailbox Configuration	Configuration of the "Voice-Mailbox". The options depent of the settings in the ixi-UMS Business Server Configuration
ixi-UMS User Information	Display of the permissions for sending ixi-UMS Messages

The user logs on to the ixi-UMS Business Portal with his e-mail address and his LDAP password and receives the web pages activated on the ixi-UMS Business.

ixi ixi-UMS Busines	ss Portal $ imes$ +		-	×
ixi-UMS Busine	ess Portal			
	Login Username Password Stay Logged in	john.smith@domain.net		

The ixi-UMS Business Portal is provided by default via HTTP on port 8890. You can additionally publish it via HTTPS.

The link to open the ixi-UMS Business Portal can be found in the user administration under "Links". The link can be sent to the users via infomail and/or in the welcome message for the ixi-UMS Voice-Mailbox.

Requirements:

- Microsoft Internet Explorer ab Version 11
- Mozilla Firefox ab Version 68

Microsoft Edge

• Google Chrome ab Version 78

The ixi-UMS Business Portal can be made available to users as "WebTabs" in estos ProCall.

1.1.9.1 ixi-UMS Web Journal

With the "ixi-UMS Web Journal", ixi-UMS Business offers every user a browser-based view of his ownsent and received ixi-UMS messages.

Requirement: The necessary user information must be available in the LDAP-user database.

The user logs in at the "ixi-UMS Web Journal" with his e-Mail-Adresse an the LDAP password. By means of the deposited sender e-mail address and the UMS-recipient number, the data are detected and the respective entries are displayed.

ixi ixi-UMS Business	s Portal X +							
Your ixi-UMS (Your ixi-UMS Components:							
ixi-UMS Web Jou	ımal			Settings Help Logoff				
Entries per page	5 🗸 Time span	all entries 🗸 🖉	Search Subject or remote numb	ber				
Service	Date	Remote station	Subject					
+ 🖷	15:32:55 13. Aug 2020	+498004564654	Important - please verify	Details 🖂 🔯				
🔶 🖷	14:45:40 11. Aug. 2020	+4965871447554	Order via Fax	Details 🙆 🔯				
+	11:52:14 13. Aug 2020	+4930456785654	Important - please verify	Details 🖾 🔯				
	14:07:46 11. Aug. 2020	+49895648754154	-	Details 🙆 🔯				
► 📇	14:07:29 11. Aug. 2020	+49895648754154	-	Details 🖾 🔯				
19 entries			ы	1 2 3 4 > ▶				

Details for sent fax message			
Sender:	+4930456785656		
Recipient:	+3956487545421		
Transmission time:	14:44:36 11. August 2020		
Subject:	Order via Fax		
Remote station ID:	+49 30 7895445876		
Number of pages:	1		
Result:	Fax sent successfully		
Open report as PDF Open	fax as PDF		

The User can displayed all relevant data for send an receipt UMS message in detail.

If the option <u>Archive associated files</u> activated in ixi-UMS Business Server, the user can open, print and save all SMS and fax messages include reports. Also he can save and listen voice messages.

Note:

All incomming messages are transmitted in the bound Mail system.

1.1.9.2 ixi-UMS User Information

The user is shown the permissions for the Fax, SMS and Voice functions set by the administrator in ixi-UMS Business.

ixi ixi-UMS Business P	Yortal X +			×
Your ixi-UMS Com	iponents:			
	ixi-UMS User Defaults ixi-			Logoff
	Rights			
	The following permissions for se	nding ixi-UMS Messages are effective for you:		
	Priority			
	Allowed send priority	high		
	Sending fax messages			
	Rights	national		
	Maximum number of pages p Maximum number of messag	er fax No information les per day Unlimited		
	Sending SMS			
	Rights	No sending		
	Sending voice message	25		
	Rights Maximum number of messag	international les per day Unlimited		

1.1.9.3 ixi-UMS Voice-Mailbox configuration

Via the ixi-UMS Voice-Mailbox Configuration every user can configure his profiles and announcements via Web interface.

Depending on the ixi-UMS Business settings the user can configure also:

- office- ans break hours
- Notifications
- Mailserver login

ixi-UMS Business Por	rtal × +	×
Your ixi-UMS Cor	nponents:	^
ixi-UMS Web Journa	Il ixi-UMS Voice-Mailbox Configuration	Settings Help Logoff
<u>Overview</u> Profile Management Change PIN	Set Profiles	Valid for all profiles
Change PIN	Set the profiles to be used: Default profile (active) Work Edit profile X no announcement in German available X no announcement in English available v callers are able to leave messages X call forwarding is inactive Profile used outside office hours	Selection of announcement language: ● defined: German ✓ ○ manually ("Press 1 for German, press 2 for English") ○ automatically (by country code of calling number) Configured at the server: • 49 423 43 41 German • Otherwise in English
	Profile used during breaks	Information about your voice-mailbox

All setting and configuration possibilities via the ixi-UMS Voice-Mailbox Configuration can be found in the user manual.

1.1.10 Client Tools

In order to make use of additional features and therewith achieve even more comfort at the workstation, the so-called ixi-UMS Business Client Tools can be installed. It is also possible to operate mixed installations, this means one part of the users works with the installed ixi-UMS Business Client Tools, the other part without or with a subset of the features of the ixi-UMS Business Client Tools.

The following comfort features are available at the client with the ixi-UMS Business Client Tools:

- Sending faxes out of any application via printer driver
- Fax-macro for Microsoft Word
- Auto fax-macro for Microsoft Word (the fax number is read out from the document)
- Mail merge fax-macro for Microsoft Word
- ixi-UMS PS Printer, for the addressing of faxes via control characters.
- Microsoft Outlook Add-Ins
- Collect faxes
- Drop point (Drag and Drop)
- ixi-UMS SMTP Client to send ixi-UMS messages without a mailsystem
- ixi-UMS Business Client Tools are included in the range of performance of ixi-UMS Business.

You can get further information about the feature and its operation in the ixi-UMS Business Client Tools Manual.

The ixi-UMS Business Client Tools are not a part of the ixi-UMS Business setup and **must not be installed on the same machine.**

1.1.11 Send faxes via control characters in the text

The ixi-UMS PS-printer can read out the fax number and the subject from the document to be printed and can transfer it to the mail client, together with the printed document. This way, a fax is addressed and sent automatically. For this, the text of the document is browsed by means of Ghostscript and the fax number/subject is read out.

The ixi-UMS PS printer is part of the ixi-UMS Business Client Tools. Prerequisite is the installation of GhostScript on the workstations.

You can get further information about the feature and its operation in the ixi-UMS Business Client Tools Manual.

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2 Requirements

The system requirements in terms of hardware and software are independent of whether ixi-UMS Business is installed on a physical or on a virtual machine - only with the connection to the PBX, a virtualization **must be considered**. The required hardware and software for the application from ixi-UMS Business is depending on:

- the ixi-UMS Business services and features used
- the number of users
- fax- SMS- and voice-traffic
- the connection to the PSTN / PBX
- the available or planned server platform.

In the following, you can find some calculation examples as well as remarks and descriptions to the connection with PBX's and the required components.

2.1 Operating System

The ixi-UMS Business Software can be installed on Windows operating systems only:

- Windows Server 2012/2012 R2
- Windows Server 2016
- Windows Server 2019
- Windows 8.x (32 und 64 bit)
- Windows 10 (32 und 64 bit)

Browser:

- Microsoft Internet Explorer ab Version 11
- Microsoft Edge

- Mozilla Firefox ab Version 68
- Google Chrome ab Version 78

If ixi-UMS Business on a virtualisierten operating system is installed, note please that the MAC address must be firmly assigned.

By using the XCAPI for the binding from ixi-UMS Business by VoIP (SIP, H. 323) on an operating system in a virtual server, you follow please the in addition required settings in the article; <u>ixi-UMS Business virtualisiert</u>

2.2 Computer Hardware

Depending on which services shall be used in which range of performance, the PC performance has to taken into account. The information performed below is to appoximate values for installations on operating systems on those is only ixi-UMS Business installed.

ixi-UMS Business as a Fax server with or without SMS (without answering maschine)

- Prozessor: at Installations with up to 4 channels : 1,5 GHz (1 Kern)
- Main Memory: depending on operating system: 6 8 GB
- free Hard Disk: 500 MB

ixi-UMS Business als UMS Server (with Fax/SMS and answering maschine)

- Prozessor: at Installations with up to 4 channels : 1,5 GHz (1 Kern)
- Main Memory: depending on operating system: 6 8 GB
- Hard Disk: 500 MB + 1 MB per User announcement

Generall note:

If the ixi-UMS messages shall be available in the ixi-UMS Web Journal to the users, the "archiving" must be aktivated. In the case must be considered, in addition:

- 45kb per Fax page / SMS
- 240 kB per 30 sec Voice message from caller

For a basic installation with ixi-UMS Business Fax and Voice on a Windows Server 2019, a "Hardware" (parameter for virtual machines) should be deployed with the following parameters at least:

- Hard Disk: 40 GB
- Prozessor: 2 GHz, 2 Kernel
- Main Memory: 8 GB

You have to take into account here, of course, that the applications (e.g. Word) are accessed for the <u>Server-</u> <u>Rendering</u> and need an appropriate main memory.

Example: A one-page Word-document, for example, needs approx. 60 MB main memory in order to opened and printed with Word 2016.

Basic Recommendation

- ixi-UMS Business and Estos UCServer can be installed together on one machine.
- It is recommendable, however, to install the modules ixi-UMS Business and/or UCServer on a machine separate from the messaging system.

Advantage:

- No influence on the messaging system when maintaining the ixi-UMS Business Server (e.g. CAPI driver update) or CTI Server
- No software installation on the messaging server
- When maintaining the messaging server, the ixi-UMS Business Server is fully ready to send and receive (processing of the queues)

2.3 Rendering Software

With the "rendering", the files and file attachments that are sent to ixi-UMS Business from the workstations, are converted into a fax-capable format by ixi-UMS Business.

This procedure allows the user to send faxes from the workstation out of formats like e.g. Microsoft Word, Excel, PowerPoint or also PDF-files by attaching the files to a message like with an e-mail.

Moreover, particular formatting (e.g. font, font size) of the text in the e-mail body can be depicted on the fax coverpage.

In order to be able to render a doc-file, for example, the respective application must be installed on the ixi-UMS Business machine installed and set up **under the installation-account.**

To setup the application login with the installation account (of ixi-UMS Business), open all application you require. All messages and profile settings must be confirmed in such a way that they do not appear again when reopening.

Tested by estos GmbH for the rendering of "Office-documents":

- o Office 2013, 2016, 2019
- OpenOffice.org 4.0 and higher
- LibreOffice 6 and higher

To configure the office software please also refer the article: Rendering of Office Documents

Transferring Fax Printing Jobs via Control Characters in the Text

If the <u>ixi-UMS PS Drucker is used</u>, is used, GhostScript must be installed on the workstations. The ixi-UMS Business Client Tools were successfully tested with the versions:

9.18, 9,19,9,21 9.22, 9.26

The Versios 9.20, 9.24 and 9.25 are not released.

2.4 Routing Methods

Normally, the standard routing setting is used for the delivery of the messages to the users. The messages are delivered to the user the dialed recipient number was assigned to. For more information pleare refer the article <u>Site Settings - Creating the</u> <u>Call Numbers</u>

Should the users use her voice-mailbox about a common voice-mailbox number, the phone arrangement / gateway must transfer the "RedirectionNumber". The ixi-UMS Business Server must be configured for it. In this case the number of the diversion device (phone) from ixi-UMS Business Server is evaluated. In the LDAP data bank the phone number of the user must be put down.

Read for further information the article: <u>Route by Redirection</u>

3 Preparation of the installation

In the following basically required preparations are shown for the installation from ixi-UMS Business. It concerns, on this occasion, general measures.

The required preparations must be extended according to installation environment individually or are not are necessary.

Specified the needed settings Configure the PBX and the needed hardware Preparation of the Computer for ixi-UMS Business Preparation of the IT environment

3.1 Specified the needed settings

It must specifierd the needed information for ixi-UMS Business:

User data base

For ixi-UMS Business the users with e-mail address and ixi-UMS recipient number must exist in the specified LDAP database or be created in the local ixi-UMS user database. A replication from an existing user database into the local LDAP database is not possible !

LDAP User data base

Depending on the selected LDAP user database, the following must be considered:

ixi-UMS user data base :

- All users must be created manual with e-mail address and UMS receiver's number. A replication from another LDAP data base (zB AD) is not possible
- If the users use the ixi-UMS Business Portal, you must send a password via email.
- If users are to be able to query the UMS messages via dial-up on the telephone, users have to specify the IMAP user name and the IMAP password via the ixi-UMS Voice-Mailbox configuration in the ixi-UMS Business Portal.

Activ Directorys :

- A user with write permission is required
- Recommended if Microsoft Exchange is used
- One of the "extensionAttributes" must be defined for storing the ixi-UMS data.
- If no Microsoft Exchange is installed, a <u>schema extension must be performed</u> to store the ixi-UMS user data.

Determination of the address space / domain for the ixi-UMS message routing

You must specify how the domain for ixi-UMS messages should be. Users must then use them to address the outgoing UMS messages.

There must be a domain for each message type to use:

- sms
- Voice oder voc
- alert (für MWI Message Waitimg Indication)
- tts

In the ixi-UMS Business configuration are offered:

0814567897@ fax.firma.de	0814567897@ sms.firma.de	0814567897@ Voc.firma.de	0814567897@alert.firma.de
0814567897@ firma.fax	0814567897@ sms.fax	0814567897@ firma.Voc	0814567897@firma.alert
0814567897@ firmafax.de	0814567897@ firmasms.de	0814567897@ firmaVoc.de	0814567897@ firmaalert.de

If the user should be use the standard e-mail client to send UMS-messages, this addressing must be entered in the mail server for e-mail routing. See the article: <u>Preparing the Mail System</u>

Alternatively, the ixi-UMS Business Client Tools can be installed on the workstations, which will send the UMS messages directly to ixi-UMS Business.

Field and format for the ixi-UMS receiver number

To send the ixi-UMS message to the mailserver, ixi-UMS Business searches for the received number in the user administration via LDAP. When the ixi-UMS number is found, ixi-UMS Business reads out the accompanying e-mail address of the user and transmits the ixi-UMS-message to the Mail Server.

The default e-mail address and the ixi-UMS recipient number must therefore be specified in the user administration.

Principally, every user in the company can get one or several fax- and voice-numbers assigned therewith. By Default, every user gets a ixi-UMS recipient number, on that all 2 sorts of messages can be received.

Add User	×		
General ixi-U	JMS Settings ixi-UMS voice-mailbox		
🗹 Enable ixi-UMS f	or this user 😮 Help		
Name	John McMarrow		
Display Name	John McMarrow		
E-Mail / Login	John.McMarrow@domain.net		
Password	Set user password		
Telephone	+49 (30) 789451526 Wrong		
Telephone (other)	+49 30 789451526 Correct		
Fax	+49 30 789451 5526 Wrong		
Fax (other)	+49307894515526 Correct		
Mobile phone	0176 84654545		
Home telephone	Home telephone		
Company	Company		
Department	Department		
Street	Street		
City	Post City		
	Close Save & Close		

The assignment of the call number is made directly in Active Directory or in the ixi-UMS user administration and can be entered or modified via the user management interface integrated in ixi-UMS Business.

The user is not assigned the extension but the full recipient number in the "E.164 format".

Remark:

An E.164 telephone number is a number in the so-called canonical format, this means it contains country code, area code, phone number and extension information. Example: +49 8142 4799123 or +4981424799123 (without all spaces)

By default, the country code, area code and call number depend on the ixi-UMS Business site settings.

When the PBX transmits the recipient number in <u>E.164</u> <u>format</u>, you may have to enter the recipient number without blanks.

Valid formats for a phone number:

+49 8142 47990	One blank space between country code and area code as well as between area code and connection number
+49814247990	without spaces

Attributes for saving UMS user properties

The rights and permissions as well as the settings of the answering machine are stored in the LDAP database in the user object.

If the connection to **Active Directory with Microsoft Exchange Server** is used, one of the 15 "extensionAttribute" (userdefined fields) supplied by Microsoft must be defined.

If users are to be managed in **Active Directory and no Microsoft Exchange Server** is installed, a schema extension must be performed. (This function is not yet included in the BETA version)

This setting is not required when using ixi-UMS User Management.

Access to user mailboxes (only required for remote access by phone)

Depending on the mail server used, the ixi-UMS Business access must be set to the user mailboxes in the mailserver. For necessary settings and examples, see the article: <u>Preparing the Mail System</u>.

3.2 Connection to the telephone system

Depending on whether ixi-UMS Business is to be connected to the telephone system via VoIP or ISDN, the following steps must be carried out:

Connection to an ISDN connection via a bintec elmeg device:

- In the telephone system an ISDN connection has to be established. See the notes in the article Types of ISDN Accesses
- The bintec elmeg device must be set up and connected to the telephone system.
 - o Instructions for setting up a bintec elmeg RT
 - o Instructions for setting up a bintec elmeg be.ip
- The LAN Capi must be installed and configured for the bintec elmeg device

Connection to a telephone system using VoIP:

- In the telephone system a trunk for SIP or H.323 must be established
- Instructions for setting up the telephone systems you can download on the <u>estos website for "Unified Messaging with ixi-UMS Business"</u>. (www.estos.de/produkte/ixi-ums-business)
- Please also note the instructions in the article Voice over IP

For detailed information about the protocols and required settings, see Connection to PBX and phone numbers

3.3 Maschine for ixi-UMS Business

The following environment must be prepared on the ixi-UMS Business Server:

- Computer with <u>Windows Operating System</u>
- .net Framework 4 must be installed
- current <u>web-browser</u>
- Member of the domain (recommend)
- IP-address and machine name of the Server should be final and should not have to be changed after the installation.
- Office Software as render software when respective documents shall be sent
- Mail client (only for testing)
- When using VoIP:
 - o Firewalls are configured or deaktivated
 - o if necessary: the virtuelle maschine is configured
- When using bintec elmeg hardware:
 - The LAN Capi is installed
 - o Firewalls are configured or deaktivated

3.4 IT-Enviroment

Depend on whether the computer for ixi-UMS Business is a member of a Windows Domain, the LDAP database to be used for users, the existing mail system, and the later-used services (Fax, SMS, Voice, MWI.) the following configurations are required:

Active Directory

- "Domain Administrator" account to install (if the ixi-UMS Business Server is a member of a Windows domain)
 - All ixi-UMS Business services will in this context run later
 - The PW should be fixed. A change of the password will result in major changes to the ixi-UMS Business!
 - If the ixi-UMS user administration is used, a local administrator (recommended as a domain user) is sufficient
- If the UMS user properties are stored in the Active Directory, a domain administrator is required for the LDAP connection (for Voice and the ixi-UMS Business Web pages)
- Optional: If no Microsoft Exchange Server is installed, the permissions to perform the schema extension are required. For detailed information, please refer to the article: "<u>Performing the schema extension</u>".

Mail system

If all incoming ixi-UMS messages and reports are send as e-mail to the user, the mail server must receive these mails and send them to the mailbox.

Depending on how the user sends the user's fax messages to the ixi-UMS Business server, either:

 At the workplace, the ixi-UMS Business Client Tools with the "SMTP" option should be installed The outgoing fax messages are sent directly to the ixi-UMS Business server via their own SMTP client. The port for sending via SMTP (default 25) must be configured at the workstations and the ixi-UMS Business server in the firewall.

or

2. A corresponding routing entry can be set up in the mailserver

The outgoing fax messages are delivered to the mailserver via the standard mail client, which sends the message to the ixi-UMS Business server

Microsoft Exchange Server

- SendConnector and ReceiveConnector are set up in Microsoft Exchange
- The IMAP4 protocol must be changed for remote access (access via IMAP 4 to the user mailbox)

For detailed information about setting up the Microsoft Exchange Server, see in ixi-UMS Business Manual the article: <u>"Preparing the Mail System"</u>

Domino Umfeld

- The IBM Domino server is set up:
 - SMTP is enabled
 - Routing entry for a "foreign domain" is entered
- For remote access (access via IMAP 4 to the user mailbox):
 <u>If the users want</u> to poll the mailboxes by telephone, all mailboxes must be converted to IMAP4

For detailed information, please refer to the article: "Preparing the Mail System" in ixi-UMS Business Manual

4 Installation

With ixi-UMS Business Setup all needed software will be installed:

- Microsoft Speech used forTTS Function
- TTS in DE and EN
- XCapi (Optional with connecttions via VoIP)
- MIT Kerberus for Windows 4.01 needed for the ixi-User Management
- Apache HTTP Server Version 2.4.43 necessary for using the ixi-UMS Business Web sides
- Firebird Server Version 3.05 necessary ixi-UMS Business Journal
- OpenLDAP Server Version 2.4.42 needed as User LDAP database for ixi-User Management
- ixi-UMS Business Server Software

Please download the newest of ixi-UMS Business from the web pages of estos GmbH, unzip the ZIP-File and start the ixi-UMS 6 Business.exe.

Before the installations can be started, you must confirm that the necessary preparations have been carried out. Please refer to the brief instructions for instructions and settings.

🕎 ixi-UMS 7 Business Installer	×
() estos ixi-UMS 7 Business Installer	
Stellen Sie sicher und bestätigen Sie das alle Vorbereitungen abgeschlossen sind. Ausführliche Informationen erhalten Sie im ixi-UMS Business Manual.	
Make sure and cofirm that all the preparations are complete. For detailed information, please refer to the ixi-UMS Business Manual.	
✓ Telefonanlage ist eingerichtet Telephone system is prepared Anleitung (DE) Manual (EN)	
✓ ixi-UMS Business Rechner ist vorbereitet Computer for ixi-UMS Business is ready Manual (EN)	
Vorbereitung der vorhanden IT-Umgebung ist abgeschlossen Preparation of existing IT environment is completed Manual (EN)	
Continue Quit	

After confirming the preparations, the ixi-UMS Business Setup can be started.

Confirm the license agreement and select the installation directory.

The default installation path is "C: \ Program Files (x68) \ ixi-UMS Business". To install the components of ixi-UMS Business in another directory, click "Browse".

🛂 ixi-UMS 7 Business I	nstaller	×
Ó	estos ixi-UMS 7 Business Installer	
LICENSE AGREEME	NT FOR ESTOS SOFTWARE	
IMPORTANT-READ (and use copies of the this estos License Ag package to the place your jurisdiction, pleas ESTOS SOFTWARE 1. GRANT OF	CAREFULLY: By opening the sealed packet(s) OR exercising your rights to make SOFTWARE (as may be provided for below), you agree to be bound by terms of reement. If you do not agree to the terms of this Agreement, promptly return this from which you obtained it for a full refund. For the limited warranty pertaining to se refer to the section LIMITED WARRANTY.	
✓ I agree to the lice	ense terms and conditions	
Target Directory:	C:\estos\ixi-UMS Business Browse	
	Back Install Quit	

Click "Install" to install the components.

😥 Microsoft Server Spe	ech Platform Runtime (x86) Setup 💶 🗖 🗙	First, the Microsoft Speech is installed for the TTS functions Confirm the license
	Please read the Microsoft Server Speech Platform Runtime (x86) License Agreement	agreement and click "Install".
	MICROSOFT SOFTWARE LICENSE TERMS	When the installation is complete, confirm with "Finish".
	MICROSOFT SPEECH PLATFORM RUNTIME 11	
	These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft • updates,	
	\checkmark I accept the terms in the License Agreement	
Print	Back Install Cancel	



The next step is to start the ixi-UMS Business Setup.

First, select the type of connection to your PBX / gateway / provider.

VoIP:

The XCAPI is installed with

ISDN:

You have installed abintec elmeg Remote-Remte-Capi.

🖟 ixi-UMS 7 Business Setup		—		\times
Service Account Enter the password for the Ins down as a Serviceaccount for a	tallationsaccount. This user is put Il ixi-UMS services		() es	tos
User name:	BAK2017\ixiadmin			
Password:	•••••			
Confirm Password:	••••••			
	<u>B</u> ack !	<u>N</u> ext	Cance	el

The service account is the user account with which you are logged on. This can not be changed here.

The user specified here is entered as a service account for all ixi-UMS Business services.

Please note:

If an Office package is used to render documents, this must be set up when the service account is changed. Refer to the manual

In the next step, all required data are copied and installed. This process can take a few minutes.

Depending on which operating system ixi-UMS Business is installed, a Windows warning message appears before the setup install the XCAPI (optional) and the ixi-UMS printer driver.



Select "Install" to continue the installation. After the installation, the <u>configuration wizard</u> is started.



Would you like to install this device software?

+-



At the end of the installation, the installation wizad for ixi-UMS Business

and the total set-up is terminated



The web page for the ixi-UMS Business basic configuration is started automatically.

5 Basic Configuration

After the installation the browser-based configuration surface is opened for the base configuration in the standard to web browser.

All not yet furnished points are shown red	Mail Server Settings
If data are not checked given, however, yet, the heading is yellow indicated	Mail Server Settings
Only if all information available and if necessarily checked, the headings are indicated green and the configuration can be stored.	Mail Server Settings

All settings can be changed later in the ixi-UMS Business configuration.

xi-UMS Business Installation	× +		- 0
D localhost:8890/ixiUMS	WebConfig/cc 🖾 80% C 🔍 Suchen	☆自	· 🕆 🛡 🛠
-UMS 7 Busine	ess Configuration		en
redentials			^
Credentials for the ixi-UMS	Business Configuration		😮 Help
Fix with which user name a	and password you would like to announce yourselves in future	e in the ixi-UMS Busines	ss Configuration.
User name (login)	ixiadmin		
Password	•••••		
Confirm password	Confirm new password		

First type in a user and passwort to login into the ixi-UMS Business Web-Admin. This user is regardless of the users in the LDAP database or the local user accounts

The language of the interface can be displayed in English or German. You can change the language in the upper right corner.

To complete the basic configuration, you must enter the license and save the Basic-configuration

5.1 Languages

Specify the languages for the ixi-UMS Business system:

5.1.1 System

The language you select here is using for:

- <u>email with the user passwort</u> (local user management)
- <u>Welcome mail</u> for the Voice-mailbox
- Default announcement of the ixi-UMS Voice-Mailbox
- The phone menu
- The ixi-UMS Business Portal
- the ixi-Infomail

Users can change the language for the voice mailbox and web pages themselves.

🗟 System				😯 Help	
Set the default language for ixi- welcome and password e-mail. users.	UMS. The default The language for	language is used for the voice-mailbox a	the voice-mailbox a nd the ixi-UMS Busir	nd the (optional) ixi-UMS information, less Portal can be changed by the	
Language	English	~			
Save Language Settings					

Available: German or English

5.1.2 Feedback and Reports

The setting is valid for all users and can not be changed by them either. All reports for send/not send messages and reports for incomming messages are created in the language set here.

Feedback and Reports			🕑 Help
Select the language for delivery a	nd nondelivery reports	s and incomming ixi-UMS Messages. This setting is valid for all us	sers.
Language	German	~	

5.1.3 Outbound TTS

A "text to speech engine" converts text into audio-files. Users can send an e-mail with text to the tts domain specified under Mail System <u>Addressing</u>.

The text of the e-mail is converted into a voice file and played to the called number on the phone.

This is where the TTS engine is defined for converting a sent text message to a WAV file.

Outbound TTS		🕜 Help
Select the speaker / "Text-to-Spe	ech Engine" to be used for outgoing TTS messages to create the V	oice file.
Speaker	Microsoft Server Speech Text to Speech Voice (en-US, Helen)	~

5.1.4 TTS for voice-mailbox

The set TTS-engines are used:

- to read aloud the e-mails when querying the ixi-UMS Voice-Mailbox by phone
- to create announcements via the ixi-UMS Voice-Mailbox configuration

TTS for voice-mailbox		😯 Help
Select the speakers / "Text-to-Spe and creating announcements in t	ech Engine" that should be available in the system for listening/reading to e-mails by p ne ixi-UMS Voice-Mailbox configuration in German and English.	phone
German	Microsoft Server Speech Text to Speech Voice (de-DE, Hedda)	
English	Microsoft Server Speech Text to Speech Voice (en-US, Helen)	

For this function "TTS-Engine" from Microsoft for the languages German, English, Italian and Dutch are installed. However, any other "MS Speech" based TTS engine can also be installed and used.

The used language to read the message is determined automatically using the text.

5.2 Hardware

You must configure the connection between the ixi-UMS Business server and the PBX / gateway / provider.

5.2.1 Konfiguration

For the function of ixi-UMS Business, the connection to the telephone system must be set up and functioning.

Depending on whether ixi-UMS Business was installed with XCAPI for VoIP connections or the bintec elmeg Remote Capi was installed before, the configuration and the test scenario differ:

<u>Set up</u> and test XCAPI <u>Binec elmeg Remote Capi</u> setup and testing

For both connections, the device and function must be confirmed after the initial configuration so that the configuration of the ixi-UMS Business can be completed.

Setting up / configuring and testing the connection must start in a web browser that is open locally on the ixi-UMS Business server.

5.2.1.1 XCAPI

If the "XCAPI configuration" is called for the first time, the <u>XCAPI configuration wizard</u> starts to set up the connection to the telephone system. After configuration, the connection to the telephone system and function of the XCAPI <u>must be tested</u>.

VoIP Installation		😯 Hel
The XCapi has to be configur	ed, please start the configuration now.	
Start Configuration	XCapi Configuration finished	
Please test the XCapi configu	ration and confirm that the test was successful.	
Start Test Tool	☑ XCapi successfully tested	

You can restart the XCAPI configuration at any time to change the settings or to enable / disable the trace. See the ixi-UMS Business Manual under Additional Information: <u>Testing XCAPI and Tracing</u>

Setting up / configuring and testing the connection must start in a web browser that is open locally on the ixi-UMS Business server.

5.2.1.1.1 Set up XCAPI



< <u>B</u>ack

 $\underline{N}ext >$

This configuration wizard only starts when the XCAPI configuration is called for the first time.

You can add additional controllers / connections at any time in the XCAPI configuration.

Specify whether you want to connect directly to a SIP provider or a PBX / gateway. möchten.

In the next step, select your provider or your PBX / gateway.

Follow the setup wizard.

Depending on the connection, you must specify the IP address or the domain, as well as data for authentication in your telephone system / gateway or the provider.

You can find examples of installations for your telephone system on the estos website for "Unified Messaging with ixi-UMS Business". (www.estos.de/produkte/ixi-umsbusiness)



To finish the configuration you must save the settings !!

After saving, close the configuration interface.

<u>C</u>ancel

When you first set up, you must confirm the XCAPI configuration once in the ixi-UMS Business configuration and start the XCAPI testing.

Basic Configuration

5.2.1.1.2 XCAPI Konfiguration

Setting up / configuring must start in a web browser that is open locally on the ixi-UMS Business server.



After you have set up the XCAPI by means of the configuration button, you can switch on the "extended menu" and, if necessary, make any necessary changes to the configuration.

For more information, see the XCAPI built-in help and the ixi-UMS Business Manual under Additional Information: <u>Testing</u> <u>XCAPI and Tracing</u>

5.2.1.1.3 Testing XCAPI

In order to check the functionality of the connection, the "XCAPI Test Tool" is started.



You can restart it at any time from the Start menu.

Check the general function by means of an outgoing and an incoming voice call.

1. Select "Voice call"

2. Enter your mobile number as a "destination number".

Please note any necessary public line access

3. Start the call.

The call must be signaled on the mobile phone. Answer the call on the mobile phone. After you have accepted the call on your mobile phone, press "Play" to play the announcement integrated in the XCAPI Test Tool. You must hear the test announcement on your mobile phone. Repeat the test with an internal phone.

XCAPI Test	(3.6.29.0) - Co	ntroller 5 - 'inr	novaphone (P	PBX object)' - 2 Char	inels			_		×
Ö	Ľ							A	۲ ۲	DI
Options	New Tab	Clear	View						voiceove	rIP
Configuration	Tab	Rej	port							
COMMUNICA	TION RT	P QUALITY								\sim
Voice Fax	1 4 7 *	2356 890#	>> [5 9 €	Play Record	PlayBack	Send Fax	C " Hold	Transfer	C Speaker	
	TION RT	P QUALITY	×							×

If both tests are successful, call from your phone and then from the internal phone to a dial-in number defined for ixi-UMS Business.

Answer the call in the test tool and play the announcement.

Only when all tests are successful, click "**Send Fax**" in the test tool and send a fax to an external remote that is known to you.

Please note:

In the left part you can see how the numbers are transferred to allow to remove a leading 0 by ixi-UMS Business if necessary in the basic configuration -<u>Phone number format</u>.

If one of the tests is unsuccessful, ixi-UMS Business can not be successfully activated. However, the configuration should continue to the end.

In the case of a problem, please read the "Additional Information - <u>Testing XCAPI and Tracing</u>" after completing the ixi-UMS Business installation in the manual.

To determine the data required for a "common voice mailbox number", please refer to "Additional Information - <u>Route by</u> <u>Redirection</u>"

5.2.1.2 bintec elmeg Remote CAPI

The bintec elmeg Remote Capi should be installed and configured before ixi-UMS Business. For detailed information, please refer to the ixi-UMS Business Manual under Additional Information: <u>Installing the Remote CAPI</u>.

Hardware	^
ISDN Connection	🕑 Help
Before performing changes to the Remote Capi configuration or starting the test tool please make sure to stop the ix Business Server service.	a-UMS
Here you can start the Remote Capi configuartion.	
Start Configuration	
Here you can start the Capi test tool.	
Start Test Tool	
Hint: The Capi configuration and the Capi test can only be run locally on the ixi-UMS Business server.	

The <u>configuration of the Remote Capi</u> can be opened at any time. Instructions for setting up the bintec router or bintec be.ip plus can be found in the ixi-UMS Business Manual under Additional information.

After set up the Remote CAPI the connection to the telefon system <u>can/must tested</u>. Setting up / configuring and testing the connection must start in a web browser that is open locally on the ixi-UMS Business server.

5.2.1.2.1 Configuration

A successful connection assumes that the bintec router or bintec be.ip plus is completely set up.

Remote Clients Configuration	? X					
CAPI Konfiguration						
Remote CAPI Erweitert						
IP-Adresse oder Host-Name des Gerätes: TCP Port de	s Remote CAPI Servers:					
IP des Routers v 2662						
Benutzername: Paßwort:	Paßwort:					
default						
Werte übernehmen Mehrere Geräte (CAPI2032.DLL)						
32-bit CAPI: Sie verwenden die Version der CAPI2032.DLL Drücken Sie 'Mehrere Geräte (CAPI2032.DLL) Informationen zu erhalten.	für mehrere Geräte. ', um weitere					
OK Abbrechen	Hilfe					

Type in the IP-Address of the PBX

If you don't like to use the Default user, enter the CAPI user and passwort, wich you has defined in the PBX.

Select "Werte übernehmen" and after that select "Mehrere Geräte (CAPI3032.dll)"

For detailed information, please refer to the ixi-UMS Business Manual under Additional Information: Installing the Remote CAPI.

After set up the Remote CAPI the connecttion to the telefon system <u>can/must tested</u>.

Setting up / configuring and testing the connection must start in a web browser that is open locally on the ixi-UMS Business server.
5.2.1.2.2 Testing Remote CAPI

A small "CAPI-TestTool" is started in order to check the functionality of the connection. You can restart it at any time

Check the general function and determine the numbers transmitted from the telephone system to ixi-UMS Business by means of an outgoing and an incoming (voice) call.

- 1. Select the controller to be tested
- 2. Select the type of connection between ixi-UMS Business and the PBX.
- 3. Optionally, you can specify a valid (sender) originator phone number. This should be displayed later on your mobile phone as sender.
- 4. Enter your Handynummer as the "destination phone number". Please note any necessary public line access

	ixi-UMS CAPI Test	Tool		x
Configure line access Controller number 1			Language English V	
Enter phonen number or read phonen nu	mbers			
destination phone number	0017548971325			
originator phone number	3596			
redirection phone number				
Result error: 0 CAPI message CAPI: bintec elmeg GmbH (RMCC)	0x0000 o.k.	Action make call wait for call	timeout 30 V	

5. Start the call using the "make call" button

The call must now be signaled on the mobile phone. If you have specified a sender number, it should be included in the displayed caller number.

Accept the call. The moment you receive the call, the connection is interrupted.

Repeat the test with an internal phone.

If both tests are successful, select the "wait for call"button (if necessary change the timeout) and call from your mobile phone and then from the internal telephone to a dial-in number defined for ixi-UMS Business. The call is automatically "accepted" and immediately terminated.

	ixi-UMS CAPI Test	t Tool	×
Configure line access	Point-to-Point / Trunk	O Multipoint	Language English V
-Enter phonen number or read phonen num	bers	2	
destination phone number	3625	Type: unknown / Plan: unkn	own
originator phone number	0017569814	Type: unknown / Plan: ISDN	/Telephony
redirection phone number			
Result error: 0 CAPI message 0	x0000 O.k.	Action make call	timoquit 20 M
CAPI: bintec elmeg GmbH (RMCC)		Wait für Call	

In the "originator phone number" field, you can see how the sender numbers are transferred from the telephone system. If a leading 0 is present, this must be removed in the basic configuration - <u>Phone number format</u> by ixi-UMS Business. The "Destination Number" field shows what the telephone system has transferred as a "recipient" number to ixi-UMS Business.

In the field after the displayed numbers (2) the Type-of-Number and Numbering-PlanP signaled by the telephone system are displayed.

Below is a table with valid (correct) relationships of NP, ToN and transmitted number:

ToN (TypeOfNumber)	NP (NumberingPlan)	übertragene Nummer
unknown/ISDN-E.164	unknown	089123456
unknown/ISDN-E.164	ISDN - E.164	089123456
unknown/ISDN-E.164	ISDN - E.164	12345
national	ISDN - E.164	8912345
subscriber	ISDN - E.164	12345
international	ISDN - E.164	498912345

Please see also the articel <u>Types of ISDN Accesses</u> under Additional Informations in the ixi-UMS Business Server Manuals.

Please note:

If one of the tests is unsuccessful, ixi-UMS Business can not be successfully activated. Check the connection parameters and settings in the Bintec elmeg device. The setup can still be continued until the end.

To determine the data required for a "shared voice mailbox number", please refer to "Additional Information - <u>Route by</u> <u>Redirection</u>"

5.2.2 Hardware Detection

The hardware detection must be carried out in a web browser that is opened locally on the ixi-UMS Business server.

After the first installation of the CAPI for the connection to the telephone system **or if** you have changed it later, this has to be read out by means of "**Hardware detection**".

Hardware Detection	🕑 Help
Here you can let detect the installed Capi and their qualities from ixi-UMS Business.	
This is only necessary if you change after the installation from ixi-UMS Business the binding in the phone arrangement.	
Detect Hardware	

Only then can you select the controllers to be used.

5.2.3 Available Controllers

Dependent of it whether you use an ISDN-or a VoIP connection with the PBX / gateway, the following configurations are necessary.

The controllers can be marked "Active" and therewith configured for the use by ixi-UMS Business.

XCAPI

If you use the XCAPI you can change the used lines. These must have the same number like in the XCAPI and the PBX / gateway furnished.

Bintec elmeg LAN Capi (ISDN)

In this case, you	can enable the	controllers individu	ally, but you car	ι not change the nι	umber of chann	els. There are 2	channels
per controller.							

Available Controllers		😮 Help
Choose which controllers for ixi- you can determine, how many ch	JMS Business you should be nannels shall beused for the r	used and give the number of the available channels. Optionally eception exclusively.
Use Controller 1		
Channels:	2	
Use Controller 2		
Channels:	0	
Channels exclusively reserver	ed for receiving	

Channels reserved for receiving

Please determine here, how many channels shall be used for the **reception exclusively**. It is not possible to determine, which channels are reserved, because this is managed by the ixi-UMS Business Server independently.

The next step is to set up the <u>connection type</u>.

5.2.4 Connection Type

These settings are only required if you are using a Bintec elmeg Remte-Capi (ISDN). In this case, you must specify which connection type is set up in the telephone system and the Bintec elmeg device.

The connection type must be the same for all controllers.

Point-to-Multipoint (PMP)

Please choose this setting if ixi-UMS Business is connected to a point-to-multipoint access (of the PBX).

Point-to-Point (PP)

Please choose this setting if ixi-UMS Business is connected to a point-to-point)access of the PBX).

Connection Type		🕜 Help
Indicate which type of connecti	on was set up in the telephone system for the connection to ixi-UMS Business.	
 Point to Multipoint Point to Point 		
Internal code	Internal code	
Number of Direct Dialing Digits	4	
Save Access Type		

Internal Code

Please enter the main number here, provided that it is transferred by the PBX.

Number of Direct Dialing Digits

When a point-to-point access is selected here, the maximum number of extension digits MUST be stated here. When 3-digit and 4-digit extensions are used, you have to enter 4 here.

5.3 Side

These are dependent on the settings of the PBX and responsible for creating the recipient number.

- The information on the tab "Server Site" is required for:
- inbound, create the recipient address in E.164-Format
- outbound, create a dialable number, if addressing with E.164 number

5.3.1 General Settings

The location settings allow the error-free telephone dialing at outgoing and the correct build form the recipient number for incoming UMS messages.

For more information, see "Additional Information - Location Settings - Site Settings - Creating the Call Numbers"

Side Address

Enter the connection number of the outside line in the form of: Country code (for germany 49) Area code (without the leading 0. For Olching, this would be 8142.) Subscriber number

()

Known exceptions: Italy - here, the leading 0 in the area code has to be entered With the removal of the area code, the accompanying delimiter is also removed by default.

Site					~
General Settings					😯 Help
Give the phone number of parametres for the dialling	your g for c	teleph outgoin	one exter g ixi-UMS	nsion and th Messages.	he basic
Site address	+	49	30	45678	
National prefix	0				
International prefix	00				
Outside line access	0				
Max. internal DDI length	3				

National AccessCode

Code to be added to the called number in outgoing messages within the country.

International Access Code

Code to be added to the called number in outgoing messages leaving the country.

Outside Line Access

Code to be dialed for getting a call out of the PBX (added to the called number in outgoing messages).

max. internal DDI length

Determines, how many digits are considered as **internal** call number, this means that no outside line is needed and therefore is not dialed.

Here in the example: Fax numbers with more than 3 digits need an outside line (see screenshot).

Moreover, the sender identification (e.g. with the reception of internal calls /faxes) is changed into the international format if it the number has 5 digits or less.

5.3.2 Phone number format

So that the ixi-UMS Business Server can determine the aim phone numbers properly and transmit, must be fixed which format the bound phone arrangement / gateway expected and transmitted. You can use the <u>XCAPI-Test Tool</u> or <u>CAPI-Test</u> <u>Tool</u> to determine the actual numbers transmitted.

Inbound

Normally the recipient numbers are signalled as a DDI and are suspended to the location information. Choose in **the E. 164** if the phone numbers are transferred in the format 4981424799585 to ixi-UMS Business.

Read moreover also the article "<u>Call Number Transfer in E.164-Format</u>" under additional information" in ixi-UMS Business Manual.

Remove outside line acces at the sender's call number

Some telephone systems transmit to the ixi-UMS Business the sender number of the incoming call with the pre-defined public access line.

In order to allow users to answer to a fax or voice message, the sender must also have a correctly formatted number, e.g. +49 8142 4799666.

'hone number format	🕜 Help
)efine which phone number format incomming calls and faxes are signalled by the TK arrangement and how for outgo nessages should be chosen.	oing
Inbound	
☐ All inbound phone numbers are signaled as E.164 ☐ Remove outside line access: All sender phone numbers are signalled with outside line access	
Outbound	
These rules apply to destination phone numbers entered in international format (+49).	
 Dial always national access and area code. If this option is checked then 0030 is dialed Always dial in the E.164 format 	

Outbound

If the phone number begins in the outgoing ixi-UMS message with + (e.g +390254789) this is shortened **default** on grounds of the server site information. After this the "outside line access" is added.

In some countries, the area code has to be dialed also with local calls. In this case, it must activate "Dieal alway national access and area code".

Is to be followed with this setting, how the phone numbers in int. Format addressed / are shown:

e.g. Italien:

national = local shown: 02 64489945

national = local shown: +3902644899 -> the "National AccessCode" 0 is a component of the phone number

In the Server Site must be put down 02 as a "Area Code" and the "National Access Code" must be empty

Choose "**Dial in the E. 164 format**" if the phone numbers should become in the format 4981424799585 the PBX / gateway-transferred.

Read moreover also the article "<u>Call Number Transfer in E.164-Format</u>" under additional information in ixi-UMS Business Manual.

5.4 User Management

Specify which LDAP data bank for the user management should be used.

User administration is performed through the <u>user management interface</u> built into ixi-UMS Business, regardless of the database in which the users are managed.

LDAP Settings

• Active Directory with Microsoft Exchange Server

The users from Active Directory are displayed. You must specify one of the "extensionAttributes" for store the ixi-UMS properties

• Active Directory worthout Microsoft Exchange Server

The users from Active Directory are displayed. You must perform the <u>ixi-UMS schema extension</u> to store the ixi-UMS properties of the users in the "ixiumsUserData" attribute.

• ixi-UMS User Administration

You must <u>create the users</u> manually in the local database. It is not possible to read an existing database.

er management	
LDAP Settings	🕑 Help
Select in which LDAP database the ixi-UMS user are administered and give if necessary connecting dat change the user database after configuration of the users, all user settings get lost.	ta. Please note: If you
Integrated ixi-UMS User Management	
◯ Microsoft Active Directory with Microsoft Exchange	
	ma setup

You find detailed information in the ixi-UMS Business manual under "preparation of the installation".

If you want to manage the users in the existing Active Directory, the required connection data must be entered.

Connection Data

This informations are only necessary if you use an Active Directory.

If the computer is a member of a domain or has access to the required DNS information, the LDAP server and the login information can be determined using the "Search LDAP server in network" button.

Otherwise you have to enter the required information.

Connection Data
Active Directory Server:
LDAP-Server.domain.net
Port:
389
use LDAPS (TLS)
LDAP Domain:
domain.net
LDAP Attribute for ixi-UMS settings
extensionAttribute1
Login Account:
admin@domain.net
Password:
•••••
Search LDAP server in network Test Connection

Login Account:

With this account the access to the data bank LDAP is carried out. Example: <u>administrator@estos.de</u>

Please note that write access to the Active Directory is required to enter the ixi-UMS properties.

LDAP-Host:

Type in IP-Adress or Name of the Active Directory Server

Port:

Normally the LDAP port for the Active Directory is the port 389.

If the communication with the LDAP-server shall be encrypted, please take care when entering the servers, that they correspond with the certificate. See also "Additional Information - Certificates",

LDAP-Domain:

Type in the name of the Active Directory domain. Example: estos.de

LDAP-Attribut for ixi-UMS settings:

If a Microsoft Exchange Server is in use, the attributes "extensionaAttibute 1-15" are offered for selection.

If no Microsoft Exchange is used, you must select the attribute "ixiumsUserData".

In this case, you must perform the schema extension.

5.5 Mail System

The incoming ixi-UMS Messages can be sent to a mailserver or stored only in the local database. The available functions and the required configuration for the ixi-UMS Business is dependent on this specification.

5.5.1 Massage Storage

The incoming ixi-UMS Messages can be sent to a mailserver or stored only in the local database. Regardless of this selection, the connection to a mailserver should always be set up to receive the informations e-mails from ixi-UMS Business.

The following messages can be sent by e-mail from ixi-UMS Business:

- Incoming / received ixi-UMS Messages
- Feedback / shipping confirmations
- Information to the standard recipient, when an outgoing ixi-UMS message is deleted
- Password E-mails, when selecting "Integrated ixi-UMS User Management"
- ixi-infomail, with informations about features and using for the user
- Welcome mail for the voice-mailbox
- Login credentials für recording the global announcemend

If no mail server is available for the receipt of e-mails, you must use the local database to store the ixi-UMS Messages and disable email delivery. In this case you must send the necessary information (<u>user password</u>, <u>access to the voice-mailbox</u>) to the users by yourself.

Also, you will **not be informed** if an outgoing message (sent by the user) is deleted because the e-mail sender was not found.

This setting is valid for all users and all ixi-UMS message types.

You can change this selection later. In this case, note that the received/sent ixi-UMS Messages remain in the previously selected location and are not moved.

Send all ixi-UMS messages to mailserver

All incoming ixi-UMS Messages and feedbacks are sent by e-mail to the mailserver and are available to the user as an e-mail in the mailbox.

ail System	/
Message Storage	🕑 Help
Select how to process inbound ixi-UMS messahes and reports and wheather the information e-mails shall be created	d and sent.
 Send all ixi-UMS messages and reports to the mail system (default) 	
The messages are delivered to the users as e-mail in their inbox	
Store ixi-UMS messages only locally (remote inquiry and sender identification are disabled)	
Inbound ixi-UMS messages and reports will not be sent to the mail system. All messages are available only via the ixi-UMS web journal. The fol	lowing
functionality can no longer be used and will be disabled: - Sender identification - Remote inquiry of ixi-UMS messages via telephone	
ixi-UMS Business will not create and send information e-mails	

Store ixi-UMS messages only locally

With this selection, all incoming and outgoing ixi-UMS Messages are only stored in the local database. They are not sent by email to the user. Users can only open and save their ixi-UMS Messages using the <u>ixi-UMS Web Journal</u> in the ixi-UMS Business Portal.

The option "<u>Archiving</u>" ist aktiv and the options "<u>Sender Identification</u>" and "<u>Remote Inquiry of the Voice Mailbox by Phone</u>" are not available and are deactivated.

The e-mails created by ixi-UMS Business are sent to the configured mailserver:

- When an outgoing ixi-UMS message is deleted to the default recipient
- Error during processing of outgoing messages
- Password E-mails to users
- ixi-Infomail to users
- <u>Welcome mail</u> for the voice-mailbox to the users
- Access data for recording a global announcement

Do not create and send informational emails through ixi-UMS Business

If you select this option, no e-mails are createt by ixi-UMS Business if:

- when an outgoing ixi-UMS message is deleted, because the sender was not found in the user database
- when creating or reset the <u>user password</u>
- about informations to use ixi-UMS Business
- <u>Welcome mail</u> for the voice-mailbox

Inbound ixi-UMS - messages to recipient numbers that are not assigned to an activated ixi-UMS user are assigned to a "default recipient". Only this user can access these messages in the <u>ixi-UMS Web Journal</u>. Enter the e-mail address of the user.

Default Recipient		🕑 Help	
Enter the e-mail address of an active ixi-UMS user as default recipient. Inbound ixi-UMS messages for recipient numbers that cannot be mapped to an active user will be assigned to that user in the ixi-UMS web journal.			
Default Recipient zentrale@domain.net			

No mailserver can be specified in the configuration interface. You only need to set the IP address of the ixi-UMS Business.

Please note:

To send ixi-UMS Messages, the specified domains must be specified in the mail server and/or in the ixi-UMS Client Tools.

5.5.2 Addressing

This configuration is only required if emails and ixi-UMS Messages are sent from the ixi-UMS Business server to the mailserver.

You must specify how the e-mail sender address should be composed for incoming ixi-UMS Messages and to which e-mail address ixi-UMS messages should be sent if the recipient number can not be found in the LDAP database.

Maildomain:

From the email domain, the sender's address can be defined by incoming ixi-UMS Messages.

Normally, you will want to create an address like Sender_Fax_Number@fax.Your_Company.com. You can change this setting in "Selection of sender address format".

Defaut Recipient:

The Default Recipient receives all the ixi-UMS Messages, which cannot be assigned to a certain user. Please use only existing email addresses from your mail system.

Addressing				😮 Help	
Specify your maildomain and a default recipient, and specify how ixi-UMS messages must be addressed.					
Mail Domain:	domain.net	domain.net			
Default Recipient:	zentrale@dom	ain.net	@domain.net		
Selection of sender address format:	\$(number)@	fax.domain.net / voc.domain.net / s	ims.domain.i		
format: Please note that the following routing entries h • fax.domain.net • voc.domain.net • sms.domain.net • tts.domain.net		domain.fax / domain.voc / domain.sms ixifax.com / ixivoc.com / ixisms.com			

Selection of sender address format:

With this template you can determine, how the e-mail sender address for incoming ixi-UMS Messages shall be composed.

This should correspond to the address for outgoing ixi-UMS Messages so that you can use the reply function on incoming ixi-UMS Messages. Please also ensure that the information here is aligned with the routing of outgoing ixi-UMS Messages and entered in the routing entry in the mailserver.

Please also read "Preparing Massaging System" under Additional Information .

5.5.3 ixi-UMS Business Setting

Please configure the IP-address and the port, on which the ixi-UMS Business shall run. The mail server <u>must send outgoing ixi-UMS Messages</u> to this IP-address and port.

ixi-UMS Business	😮 Help		
Configure on wich IP address and port ixi-UMS Business should listen for outbound messages from your mailsystem / ixi-UMS Client Tools.			
The outbound routing of your m	ail server has to be configured to send outbound ixi-UMS messages to this address and port.		
Local IP-Address:	10.10.10.170 ~		
Port:	25		
Options:	The mail server has to authenticate itself		
	Test		

Optional you can state a user and password, with that the mail server.logs in at the ixi-UMS Business server.

Wenn Sie die ixi-UMS Nachrichten direkt von den ixi-UMS Business Client Tools an den ixi-UMS Business Server senden möchten, können Sie die Option "Authentifizierung" nicht nutzen!

Press the "Test"-Button to check if the selected IP-Address and Port can be use.

5.5.4 Mailserver Settings

Here you can determine settings for the communication of the ixi-UMS Business Server to the mail server (for incoming ixi-UMS Messages, reports and all information E-Mail)

Mailserver Host:

Type in the name or IP-addresse of the Mail host to which incoming ixi-UMS Messages will be send.

Port:

Specified Port on witch the mailserver receives E-mail

Mail Server Settings		🕑 Help	
Specify the mail server to be used by ixi-UMS Business for sending e-mails and select the connection options.			
Mail Server Host:	mailserver.domain.net		
Port:	25		
Options:	Activate TLS		
	Mail server requires authentication		
	Test Connection Send test message to the mail ser	ver	

Mail server Connection Test	×
Connection test successfully finished!	
Issued to: estos.de	
Issued by: SSL.com RSA SSL subCA	
Valid from: 2020-01-22T15:27:55Z	
Valid to: 2022-04-21T15:27:55Z	
Show extended info	
Clos	e
Clos	e

Options:

This next to settings are only necessary if the mail server requests this explicitely.

Activate TLS:

If you want to use TLS, be sure to enter the name as the "Mailserver Host" on which the certificate was issued. During the connection test the certificate of the e-mailer is requested and displayed.

During the connection test the certificate of the mail server is queried and displayed.

The certificate transmitted by the mail server is checked for validity by the <%PRODUCTNAME%> against the Windows certificate store "Trusted Root Certification Authorities".

For subordinate CAs please make sure that the certificate chain can be resolved.

Mailserver requires authentication

User name:	domain\username	
Password:	•••••	

Mailserver requires authentication:

You can state a user, with that the ixi-UMS Business server logs in at the mail server.

This entry is only necessary if the mail server requests this explicitely.

Check with the "Test connection" button if the connection to the mailserver can be successfully established.

Send test message to the mail server:

When the basic installation is completed, the connection can be tested by sending a test message. In this case, not only the transmission via SMTP, but also the number assignment to the user by LDAP is checked.

Send test message to the n	nail server	×
Here you check the connectio	n between ixi-UMS Business and the mail system.	
As sender number number yo	u can just specify any number. It will be used to form the mail sender address.	
The recipient number must be • Default: With blanks (e.ç • Numbers are signaled in	entered in canonical format: j. +49 8151 12345) E.164: Without blanks (e.g. +49815112345)	
If you specify an invalid recipie	ent number the message will be delivered to the default recipient (see Addressing).	
Sender number	Sender number	
Recipient number	Recipient number	
	Send	ose

5.6 License

In order to start ixi-UMS Business, you must <u>enter a license key</u>. You received this with the purchase of the ixi-UMS Business package. Alternatively, you can create a 45-day test key.

This operation can only be performed directly on the ixi-UMS Business Server.

Click "Open the License Manager" to start the process.

License	^
License Keys	😯 Help
Start the license manager in order to enter and active your license key.	
Hint: This must be done locally on the ixi-UMS Business server. Open the license manager	

5.6.1 Lizenz Key

" 0	estos ixi-UMS Business I	The license management is opened.	
Licenses			
	Description	Amo License	Click "Add" to enter your license code.
e.	No licenses available		
	Über Hinzufügen können Sie vorhande Tage laufende Trial Lizenz herunterlade	ne Lizenzen eingeben oder Online eir n.	ine 45
	Enter	license 💌	
	Enter license		-
	Enter the license as it is pr	inted on the license card.	Enter your license code and confirm
	4		vour entry with "Ok"
	4AVH113X-ZRWDXL	IT-2MDVK1AX-ZUF5XCL8	
	Wenn Sie noch keine Lizen beantragen und den Treib	z besitzen können Sie eine Test-Lizenz er 45 Tage testen.	
	Test-L	izenz beantragen	
		Ok Cancel	The estos ixi-UMS Business licenses are
			hardware-bound.
		Ok	<u>>k</u>

1) Confirm the binding to the hardware from the computer.

Bind license on hardware	
Bind license on hardware Image: The entered license requires a hardware binding. 49GH111Y-RVLM9Q6Y-AUP4PD3U-SXSBMRQX Do you want to bind the entered license now?	Link license to hardwo The entered before use, will be estail
Bind license Ok Cancel	<u>Show detai</u>

2) In the next step, the signature is created and a connection to the estos license server is established.

	ESTOS License Tool
Link lice	se to hardware online
and the	The entered license must be linked to the hardware of the system before use. To link the license a connection to the license server will be established.
	Link license online
	Show details Cancel

If a connection to the license server was established, the license Otherwise, you are offered <u>additional options for</u> is activated, entered and the range of ixi-UMS Business is displayed. <u>activating the license</u>.

🔎 es	tos ixi-UMS Business l	.izenz Verwaltun	g 🗙	ESTOS License Tool
Licenses				Link license to hardware online
Licenses	 Description Total active license User Kanäle Sersi sixi-UMS V6.x User Kanäle 	Amount Licen	se	The following data is transferred with the request:
	<u>A</u> dd ▼	<u>R</u> emove	<u>H</u> ardware	Lancel

The input is now complete and has to be terminated with "OK".

5.6.2 Lizenzübersicht

If you have entered a license, the scope is displayed to you.

License Overview		😯 He
Hint: The license overview is not updated automat icense manager.	cally. Please press "Refresh" a	fter entering or removing a license key in the
Entered licenses:	1	
Number of licensed channels:	4	
Number of licensed users:	10	
Entered XCapi licenses:	1	
Number of channels in active XCapi licenses:	0	

5.7 Finish basic configuration

When you have made all the entries and the license has been installed, finish the basic installation.

ixi ixi-UMS Business Installation \times +			-	-		×
Collocalhost:8890/ixiUMSWebConfig/ 🖾 80% Collocalhost:8890/ixiUMSWebConfig/	☆ 自	Ŧ	Â	◙	8	≡
ixi-UMS 7 Business Configuration					en	
Credentials					\sim	
License					\sim	7
Finish Installation						_

Now all ixi-UMS Business services are started.

ixi-UMS Business Installation finished ×
The base configuration is now finished, for advanced configruation please login into the configuration using the configured credentials.
ок

The configuration interface opens automatically when you confirm with OK and the start process is complete.

6 Configuration and Administration

After completing the <u>basic configuration</u> for the "<u>basic settings</u>", the ixi-UMS Business configuration is opened. Log on with the data entered in the <u>initial configuration</u>

(i) localhost:8890/ixiUMSWebConfig/log 80% C Q Suchen	☆ 自	+ 1	8	≡
ixi-UMS 7 Business Configuration			en	~
Administrator Login				
User name Password	Login			

After logging on, you will be given the menu and, if necessary, a hint that one or more services are not running.



On the "Configuration", you can make all required and optional settings for ixi-UMS Business .

On the "<u>User Management</u>" page, you can create or manage the users, and the Journal and monitoring options are offered in the "<u>Monitoring</u>" section.

The ixi-UMS Business configuration can be started at any time via the Start menu or by entering the URL. Http:// <IP address of the ixi-UMS Business Server>: 8890/ixiUMSWebConfig/

6.1 Basic Settings

The settings of the "basic setting" correspond to the "<u>basic configuration</u>". You can change it at any time and adapt it to a changed IT or PBX environment.

Under "Credentials", you can change the login data for the configuration interface and the server journal.

🗶 ixi-UMS 7 Business Configur	× +			-	
i localhost:8890/ixiUMS	WebConfig/con 80% C	Suchen	☆ 自 🖡	r 🛡	8
ixi-UMS 7 Busine	ess Configuration	① Service warning	! To the services	en 🗸	Logout
Configuration User	Management Monitoring				
Basic Settings Fax an	d SMS Voice-Mailbox Advance	d Settings	∧ Collapse Al	ll ∨Exp	and All
Credentials					^
Credentials for the ixi-UM	S Business Configuration			0	Help
Change your credentials f	or the ixi-UMS Business Configuration.				
Attention: The current cre	dentials will become invalid!				
User name (login)	ixiadmin				
Password	New password				
Confirm password	Confirm new password				
Languages					~
Hardware					~
Site					~
User Management					~
Mail System					~

6.2 Fax and SMS

Here you can make optional settings for the "Fax" and "SMS" functions.

ixi-UMS 7 Business	Configura 🗙 🕂					-		×
(il localhost:889	0/ixiUMSWebConfig,	/cor 80%	C Q Suchen	☆ 自	∔ ก	◙	8	≡
ixi-UMS 7 B	usiness Cor	figuratio	n			en 🗸	Logou	ıt
Configuration	User Manageme	nt Monitor	ing					
Basic Settings	Fax and SMS	oice-Mailbox	Advanced Settings	∧ Colla	pse All	∼ Exp	oand A	II
Fax Settings							~	r
SMS Settings							~	ŗ

6.2.1 Fax Settings

These settings only affect ixi-UMS fax messages and the confirmation of fax messages. Some settings are not available if you selected the ixi-UMS Messages and confirmations only <u>in local storage</u>.

6.2.1.1 Sender Data

The sender information entered here is "printed" on every fax and applies to all users.

Sender name

The sender name is freely selectable. If only the Sender ID is to be transmitted, at least one "." in the Sender name must type in.

🐻 Sender Data		😮 Help
Put down here the information the Fax sender number registere	which should appear in the head line on every sent fax. The sender ID is co ed by the users.	omplemented with
Sender name	Company AG	
Sender ID	+49 30 45678	
	Use site address as sender ID	
Save Sender Data		

Sender ID

Here the part of the sender number that is valid for all users should be entered. By default, the phone number entered in the location is entered as sender identification.

This means that only the individual dial-in number has to be entered as "fax number". Only the characters "+", "", "0" .. "9" are valid

Please note that this number, including the user ID max. 32 characters.

6.2.1.2 Outbound fax messages

In the User Administration, a sender number can be entered for every user and permissions for the sending of messages can be assigned. If this option shall not be used or if not all the users have been configured yet, default rights can be determined here.

The setting is overwritten by the individual user settings. These settings are only valid for users, whose e-mail sender addresses have been found in the LDAP-data base.

Outbound fax messages	😯 Help	
Define which settings for users are valid if these in the user management no individual permission were put down. Default right:		Default right Here it is entered how "far" a user is allowed to send ixi-UMS fax-messages.
International Maximal allowed pages: 60	×	Max. Fax Pages: If the user wants to send a fax with more pages than entered here, he gets an error message.
On the cover page the text of e-mail is inserted. Fix the default coverpage and when it should be provided and therefore the tex e-mail be dispatched: Default coverpage: EN_With_Sender © With text in the e-mail body, independent of the attachment Always, even if there is no text in the e-mail body Only if there is no attachment Never, only attachments are sent	t of	Default Coverpage The folder selected here must contain the universally valid coverpage which is always used when the user has no other specification. The selected coverpage is used whenever no other folder is specified in the outgoing message.
Save		

For instructions on how to create your own coverpage / cover sheet, see "Additional Information: Creating a Coverpage

By default, **with text in the e-mail Body** a coverpage is only generated if text is entered in the mailbody (regardless of whether an attachment is present or not). This behavior can be changed to:

Always, even if there is no body ... it is generated with all faxes (also with faxes without Bodytext) a coverpage. **Only if there is no attachment ...** only one coverpage is generated, if bodytext is present, but no attachment. **Never, only attachment is send:**.. the body text never send in the fax message.

Please note:

If "Never .." is selected and a user sends only a body text, an error message is generated.

6.2.1.3 Inbound fax messages

By default, the fax messages are sent to the user as an e-mail with a PDF attachment, with the receipt report being created in the mail body. This setting is not available if you selected "<u>Store ixi-UMS Messages only locally</u>". The report of the ixi-UMS Business server can be added into the PDF **in addition.**



In this case, the ixi-UMS report is generated as the first page in the PDF and the complete fax message are the next sites



6.2.1.4 Report notifications

The transmission report on sent and non-sent ixi-UMS fax messages are always sent to the user as a PDF attachment with the original fax. The report of the ixi-UMS Business is in the "body" of the e-mail. This setting is not available if you selected "<u>Store ixi-UMS Messages only locally</u>".

Optionally, the ixi-UMS Business server Report Notfications Help transmission report can be included in the PDF. Normally positive and negative reports are send to the user as e-mail with the fax In this case, the report and the first report as a text and the original fax as a PDF appendix. Alternatively you can change the page of the fax are grouped into one PDF attachment to only one side, consisting of the fax report and the first side of the page - all subsequent pages of the original Faxes. original fax are no longer included in Combine report and first page to one page the PDF. H 50 2 × DATEI NACHRICHT EINFÜGEN **ÜBERPRÜFEN ENTWURF** OPTIONEN TEXT FORMATIEREN Do 26.01.2017 12:24 IXI-UMS-Connector@IXI-UMS.fax Fax sent successfully 479943: Order Nr. 12348979 Pages: 1 Karin Sandmann An Nachricht 🔝 DRFax.pdf (39 KB) ixi-UMS Fax Report: Fax sent successfully ixi-UMS Business Computer Name: ixi-UMS Server estos Transmission time: 26.01.2017 12:23:46 Spe 📙 🖶 🖃 粒 🥠 🔿 🕹 🕶 DRFax.pdf - ... 🛱 🗠 😐 🖾 Pag Tran Suchen 🔎 🔅 • < 🕓 🔲 • . a \heartsuit ۲ Fax ۰ Rec ixi-UMS Fax Report: Rec ixi-UMS Business Computer Name: WIN-6LKHNDNDB Subi Result: Fax sent successfully Recipient Station ID: +49 8142 479943 H, Recipient fax number: 479943 Subject: Order Nr. 12348979 Transmission time: 26.01.2017 12:23:46 Ъ Speed: 14400 Pages: 1 🗥 Einige Funktionen des Personenbereichs sind de Transmission retries: 1 Ø A NACHRICHT 10 **F F** 100% ۰Ю Ð

6.2.2 SMS-Settings

ixi-UMS Business offer SMS dispatch using several providers. To use these services, you must be registered with one of the providers listed who will invoice you for this service.

With some providers you have to have a static IP in order to use the service.

Simply compare the various providers and pick out the most favourable one for you.

Sending SMS		🕑 Helj
Here you can activate th services you must be reg suitable fees to you for th Enable sending SMS	e SMS dispatch about a web SMS supplier. For the use of th istered with one of the deposited suppliers who charge for his service.	iese
Select your supplier a	and put down the login data called by the supplier.	
Provider	bulksms.com	\sim
	possible without subscription, worlwide sending Sending via: https://bulksms.2way.co.za /eapi/submission/send_sms/2/2.0 http://www.bulksms.com	
Login account	usemame	
Password	•••••	
Define which sending management no indir Default right	permissions for users are valid if these in the user vidual permission were put down. international	
Test messages can be se	nd using the queue.	

If you aktivate "**enable sending SMS**", you can configure this.

Provider

Select one of the SMS providers you have stored.

Different providers allow you to use gateways to take advantage of certain features. A brief guide describes the individual gateways and their performance features.

Depending on the provider, you can provide the reply address in the request. If this allows the provider, you must set the "mobile phone number" in the <u>user</u> <u>management</u>.

Depending on the provider you have to enter:

Login Accound an Password

In the User Name and Password field, enter the Login data provided by the provider.

API-Key

Enter the key you received from the provider.

Default right

It can be defined whether users are generally allowed to send SMS or not. The setting can be <u>changed per user</u>.

6.3 Voice-Mailbox

If a voice-mailbox is to be made available to the users, this function can be activated and set up here. The <u>scope and the functions</u> can be defined globally by you here. Some settings can be modified later by the users themselves. Some settings are not available if you selected "<u>Store ixi-UMS Messages only locally</u>"..

6.3.1 Basic Settings

Sie müssen festlegen welche Funktionen standardmäßig frei gegeben sind und welche Rufnummern genutzt und bekannt gegeben werden.

Some settings are not available if you selected "Store ixi-UMS Messages only locally".

6.3.1.1 Default Permission

If the voice-mailbox is activated, the answering machine is available on its ixi-UMS number by default. The **default authorization level** is used to define the user rights assigned to a user by default on the first call. The access permission can be changed per user in the user administration.

Regardless of the access type selected here, the web page for the ixi-UMS Voice-mailbox configuration is available to all users. Users can set up and manage all 6 profiles, as well as record the announcements.

The link to ixi-UMS Voice mailbox configuration can be found in the "Links" dialog under User management.

Standard authorization level	🕜 Help
Specify whether users should have an ixi-UMS Voice-Mailbox available. When enabled, each user has access to the ixi- Voice-Mailbox Configuration web page.	UMS
Enable Voice-Mailbox	
Define the authorization level for accessing the ixi-UMS Voice-Mailbox, which is valid for all users, if no individual authorizations have been entered in the user administration.	
Only voice-mailbox - No login possible from the phone	
 Voice-mailbox with login from the phone - no remote enquiry Voice-mailbox, Login from the phone and remote enquiry 	
Save	

• Only Voice-mailbox

The announcement recorded by the user at the ixi-UMS Business server is played, the message of the caller is recorded and sent to the user assigned to this voice-mailbox by e-mail.

The user can play the message via a double-click on the PC or forward it as e-mail to his telephone and listen to it there.

• Voice mailbox with configuration by phone

Like "only Voice-mailbox". In addition, the user can call his UMS number and log in using a PIN. He can set up the 6 profiles on the telephone and use all other profile settings (Except MWI switch and set office hours)

• Voice mailbox with configuration and remote inquiry by telephone

Like "Voicemailbox with configuration". In addition, an IMAP4 access is made to the user's mailbox when the user calls his UMS number. If new voice messages or e-mails are in the mailbox, they can:

- Listen
- Call back the caller
- answer to the caller
- Delete the message

• send as an e-mail (internal) or as a voice message to a telephone.

This setting is not available if you selected "Store ixi-UMS Messages only locally".

6.3.1.2 Global Announcement

By default, when a call is received, the default announcement is played back as long as the user has not made a separate announcement (see <u>Overview - Features - Voice</u>). You can discuss this standard announcement yourself.

Remark:

Only one announcement can be deposited. If required, it must contain the announcement in different languages. A language differentiation is not supported.

The global announcement

- can be recorded via an "Admin-page" or
- can be deposited as wav-file directly in the file system in in: ..\ixi-UMS Business\ixi-UMS EnhVoc\USERS\GlobalAnc\announcementGlobal.wav.

The link for opening the admin page is shown under "<u>User Management - Links</u>" and can be sent to any email address, including the access data and instructions, by e-mail.

🗟 Global Announc	ement 😯 Help	
You can save your to the caller as lon announcements in	own global announcement, which is played g as the users have not stored their own their voice-mailbox.	
Use global anno The global announ application. This er another person wit the web configurat application.	ouncement icement is recorded with a separate web nables you to delegate the recording to thout the need to disclose the credentials for tion. Sepecify the credentials for this web	
Login:	ixi-User	
Password:	•••••	
Sender number:	5123	
Save You can send the c address you want t the settings have to	redentials by e-mail. Enter the e-mail the credentials to be sent to. Please note that o be saved before!	
Recipient e-mail:		
john.macmarrov	v@domain.net	
Send e-mail		

The language of the "Adminseite" is defined by the <u>defined system language</u>.

Global Announcement
In order to record a global announcement, please enter the administrative login data and your DDI.
The global announcement immediately applies to all the users that have not recorded an announcement.
Authentiestion
Please enter the login data you received from your administrator.
User name:
Password:
Record Please enter the phone number or DDI, at which ixi-UMS shall call you in order to record the global announcement.
Telephone number/DDI:
Record global announcement

For recording the announcement via the Admin-page, the access data determined here as well as a valid (Fax) **sender number** for the ixi-UMS Business are required.

User name and Password are arbitrary and are not checked against an LDAP-directory.

Please note that a working connection to the mailserver must be set up for the sending of e-mails.

Before you send the e-mail, you must save the settings !

6.3.1.3 Shared Voice-Mailbox nummer

The method "Route by Redirection" allows that all the users can use the same voice mail number (voice pilot number) and nevertheless have their individual voice box.

Shared Voice-mailbox number	🕑 Help
If you activate this option, all same phone number is available users for the voice-mailbox and the ixi-UMS Voice-Mailbox it is determined with the help of the phone number of the divertin The phone number of the phone must be put down in the use bank with the user in the field "phone number" or "phone num Other".	e to the g phone. r data mber
Common phone number for the voice-mailbox use Call number 5999	

The left voice-message is forwarded to the number originally dialed by the caller (original telephone number). This telephone number must be entered in the field "<u>Phone number</u>" or "<u>Telephone</u> <u>number - Other</u>" in the user administration in the form:

+49 8142 4838157 or +4981424838157

For detailed information on the function of "Route-by-Redirection" (common voice mailbox), see the additional information under "<u>Route by</u> <u>Redirection</u>"

6.3.1.4 Welcome Mail

If this function is activated, the welcome message will be generated and sent the first time you call the ixi-UMS Voice-Mailbox. Regardless of this setting, you can re-create and send the welcome message at any time in the <u>User Management</u>.

Note: The welcome mail are only sent, if you send e-mails to a mailserver.

ම් Welcome Mail	🕑 Help
The welcome mail is sent as an e-mail to the user. It automatically generated PIN, the ixi-UMS Voice-Mai number, a link to the ixi-UMS ixi-UMS Business Porta manual for the voice-mailbox.	contains an Ibox al and the
The welcome message can be created manually at to object and/or automatically during the first call on to Voice-Mailbox.	he user the ixi-UMS
Take up the following number as "voice-mailbox number" in the welcome mail:	phone
fax number	
O first number in "fax number - Other"	

The Welcome Mail informs the user about:

• The ixi-UMS number

It must be specified here, from which LDAP field the "Voice-mailbox phone number" for the Welcome Mail should be read out. If a "Shared<u>voice mailbox</u> <u>number</u>" is used, this must be entered in the Welcome Mail. See also the additional information <u>Route by</u> <u>Redirection</u>.

The PIN for access by telephone

If the user already entered a PIN in the LDAP database, the PIN is read out and sent to the user. Otherwise, a new PIN is generated.

• The link to the ixi-UMS Business Portal

In the ixi-UMS Business Portal the ixi-UMS Voice-Mailbox configuration is available to the users for setting up and discussing the voice mailbox. If "remote inquiry by telephone" is activated as authorization, the required password for the mail server login can be entered here in the ixi-UMS Voice-Mailbox configuration.

• the user manual for the voice mailbox

• The user guide for the ixi-UMS Voice-Mailbox.

If no welcome message is sent, the default PIN 12345 becomes valid.

Alternatively, you can enter a PIN for the user in the user administration. The user can change the PIN via the ixi-UMS Business Portal.

6.3.1.5 Recordingtime

A voice mail message can not be longer than the specified maximum length. After this time interval the recording of the message will be aborted

Recordingtime				🕑 Help
Configure the maximum recording	ng time of voice-	messages. A	voice-message has to be at least 3 seconds long.	
Maximum Recordingtime:	240	seconds		

6.3.2 Security

This setting is only relevant if the users are allowed to log on to the voice mailbox by phone.

You can set whether the "ixi-UMS Voice mailbox" should be deactivated after 3 incorrect PIN entries. In this case, the user is notified of the blocking by e-mail.

coBin no cerephone		😯 Help
Determine how long th	e PINs generated by ixi-UMS Business are accessible to the i	xi-UMS Voice-Mailbox for access by
telephone. PINs that a	e newly assigned by the user must have at least this length.	
Optionally, you can sp	ecify whether the ixi-UMS Voice-Mailbox is blocked after 3 er	ror inputs and/or can be accessed by the
office telephone witho	ut PIN input to the voice-mailbox. In this case, the telephone	number of the office telephone must be
stored in the user data	base in the "Telephone number" or "telephone number othe	er".
	_	
PIN length	5	

In principle, the users of each phone can log in by entering the PIN on your Voice-mailbox. Optionally, you can specify that the user does not have to enter the PIN when he logs in from his "office phone". It ist necessary the phone number must be entered in the user management in the user object in the "Telephone number" field in the format +49 8142 4838456 or +4981424838123.

6.3.3 Remote inquiry

If the ixi-UMS Voice-mailbox is enabled for the "remote inquery", the connection and access via IMAP4 to the mailserver must be set up.

This settings are not available if you selected "Store ixi-UMS Messages only locally".

6.3.3.1 Access via IMAP

This setting is not available if you selected "Store ixi-UMS Messages only locally".

Specify on which port and with which protocol the IMAP access to the mailserver (specified in <u>the basic setting</u>) must be connected.

For Microsoft Exchange 2010 or newer, the IMAP-access via IMAPS can be used. With Domino, IMAPS is not supported! Please note the <u>instructions for setting up the mail system</u> in the additional information.

Remote Inquiry		^
Access to the mail serv	ver via IMAP4	😮 Help
By using remote acces occurs in each case wi this access. The connection is esta	is via phone it is accessed by IMAP or IMAPS access to the suitable user post of the user-registration data deposited in the user management. The mail set user management is a solution with the mail server (10.10.10.100) specified in the basic setting. Specified in the basic setting.	office box. The registration erver must be furnished for ecify port and protocol for
access.		
Port	143 use IMAPS (TLS)	
	Connection test	

You can use the **Connection test** to check access (including login) to a mailbox. Specify the registration data and start the test.

IMAP Connection Test		×
Please enter the IMAP creden	tials for a user. These will be used by ixi-UMS Business to	test login at the IMAP server.
Username:	Domain\mcmarrow	
Password:	••••••	
		Start test

When using Micrsoft Exchange, please note:

The "Administrator" used to install the Exchange Server does not have IMAP4 access!

6.3.3.2 IMAP-Ordner

This setting is not available if you selected "Store ixi-UMS Messages only locally".

By default, a new folder "Deleted ixi-UMS Business Messages" is created here and the deleted messages are moved there. When the checkmark is removed, the messages deleted via the telephone are deleted irrevocably.

IMAP Folder	elp
In the "remote polling by telephone", ixi-UMS messages are searched in the user's inbox. Messages deleted via the phone are moved to a new folder "Deleted ixi-UMS Business Messages" by default. If this folder does not exist and can not be created by ixi-UMS Business, ixi-UMS messages can not be deleted via the telephone. In this case, the ixi-UMS messages can be deleted directly.	ŗ
Messages deleted via telephone will	

Please note: With a Cyrus mail server, for example, this folder cannot be created. The checkmark then should be removed.

6.3.4 Global User Settings

Here you can specify which settings the users are allowed to make and change themselves on the ixi-UMS Voice-Mailbox. This setting is not available if you selected the ixi-UMS Messages and confirmations only in local storage.

Users can always manage their announcements and profiles via browser-basierten ixi-UMS Voice-Mailbox Configuration. Some additional features can be disabled for the ixi-UMS Voice-Mailbox.

Configure and enable call transfer:

If this option is enabled, the user can optionally offer a caller to connect to another phone number or leave a message. This option is available to the user in the browser-based ixi-UMS Voice-Mailbox configuration and in the configuration via telephone.

🖥 User Rights	😮 Hel
Specify which features users can use or change in their own voice mailbox:	
Set up call transfer	
Set own office hours	
Set up notifications via MWI on the office phone	
Enter a phone number for recording the announcement	
Store IMAP access data (required for remote inquiry)	
Create announcements using text-to-speech	

Set own office hours.

In the ixi-UMS Business server are set as standard office hours: 8am - 5pm.

By activating the "Set own office hours", the user can enter individual working and break times via the browser-based ixi-UMS Voice-Mailbox configuration and specify a off-hours profile and break profile.

Set up notification via MWI on the office phone

If the user is allowed to set the notifications, users can activate/deaktivate this setting themselves via the browser-based ixi-UMS Voice-Mailbox configuration.

Please note that the connection to the PBX must support this feature and ixi-UMS Business must be configured for this. If this is not the case, the corresponding hooks should be removed here.

Enter a phone number for recording the announcement

If the users want to record their announcements via the browser-based ixi-UMS Voice-Mailbox configuration, the office / telephone number registered with the user is used by default.

If the option is activated, users can enter the phonenumber by which they wish to record the announcement.

Store IMAP access data

If users are able to access the messages by using the phone, they must store their logon data for the mailserver. User administration in the Active Directory with Microsoft Exchange: Users must store their (Windows) password User administration in ActiveDirectory without Microsoft ExchangePassword and ixi-UMS User Management: Users must provide their login name and password for mail server access.

Create announcements using test-to-speech

The user can type his greeting in the text field and have it created by the TTS Engine installed on the ixi-UMS 7 Business.

6.4 Advanced Settings

If necessary, you can activate additional functions. A Meta Directory must be installed for the SenderIdentification function.

6.4.1 Additional Features

You can set up some functions for which you may need and install additional software.

6.4.1.1 Sender Identification

In order to <u>resolve sender numbers</u>, an installed MetaDirectory is required. The Meta Directory is liable to costs. This setting is not available if you selected "<u>Store ixi-UMS Messages only locally</u>".

The connection data to the MetaDirectory must be entered. The MetaDirectory data base can be installed on the ixi-UMS Business-server or on another server.

The sender numbers are searched for in the fields:

telephoneNumber

- mobile
- homePhone
- otherTelephone

Help

Sender Identification

facsimileTelephoneNumber

otherFacsimiletelephoneNumber

You can use the MetaDirectory to resolve the senders' numbers of incoming messages to display information about the sender in the text part of the e-mail. The connection data for the MetaDirectory must be entered. The MetaDirectory database can be installed on the ixi-UMS Business server or on another server.

Enable Sender Identif	lication
MetaDirectory	
Host:	192.168.145.56
Port:	712
Base DN:	dc=meta
Login	O Anonymous access
	Login required
	Login mcmarrow
	Password
	••••••
Test Connection	
Use the first data reco	ord if the search produces several results
If this option is disabled,	, the original recipient will not be replaced in this case.
Save	

Login required

Optionally, the user and password for logging in to the MetaDirectory can be given.

This is required if the estos MetaDirectory with activated user management is in use.

The specified username must match the username in MetaDirectory.

eg: "user@domain.com" or "user name"

When the checkmark is set at "**Use the first data...**" and several results are found with a search, the data from the first data record are entered. If this option is disabled, data is only entered in the mail when the result is unambiguous.

6.4.1.2 Incomming printing

Incoming faxes can be printed on a printer in the network.

You can determine whether all fax-messages , only the fax-messages to a particular call number = or all the fax-messages of a particular number range shall be printed.

Range:	Configuration	Beispiel
One recipient	Specify an extension	9452
Call number range	Specify a range	9*
all fax-messages	Wildcard	*

Print Inbound		🕜 Help
Incoming fax-messages can also be printe Up to 5 entries can be created.	ed for all, a number range or a single	e recipient number on an installed network printer.
Printer	Recipient	
Lexmark LaserJet	+4930456785456	Edit Delete
Canon Office Printer	+49304567857*	Edit Delete
Add		
Save		

The full fax will be printed - without a reception report.

It is not possible to print feedback or status reports.

Recommend:

- The printer has to be installed on the IXI-UMS machine as printer in the network.
- The IXI-UMS Serviceaccount must have permission to print on this printer

6.4.1.3 Message Waiting Indication

Here the settings for the "Message Waiting Indication" connection to the PBX are determined. This configuration depends on the telephone system and if used VoIP or ISDN connection.

VoIP (XCAPI)

In ixi-UMS Business no configurations required. The PBX-specific settings must be made in the VoIPconnect / XCAPI an the PBX.

You can find information on setting up telephone systems connected via VoIP on the <u>estos website for "Unified Messaging with</u> <u>ixi-UMS Business</u>". (<u>www.estos.de/produkte/ixi-ums-business</u>) or ask estos GmbH's Support.

Message Waiting Indication aktivieren

When using the XCAPI, no further settings need to be made after configuration of the telephone system and the XCAPI. If a telephone system is connected via ISDN (elmec bintec), service and / or code numbers may still have to be stored.

 Message Waiting Indication
 Incoming voice messages are sent to the user via e-mail in his mailbox. In addition, you can set an "MWI notification at the office phone". Please note the required configuration of the telephone system and the CAPI. For further information please refer to the manual.

 Depending on user rights, the user can enable/disable this feature through the web-based voice mailbox configuration.

 Enable Message Waiting Indication

Set MWI on

If this option is activated, a MWI notification is sent to the telephone registered as a telephone number in the user administration for each incoming voice message.

You can authorize the user to enable / disable this option in the ixi-UMS voice-mailbox configuration.

ISDN - Qsig und DSS1

All the PBX's that support Qsig MWI ECMA 241 and 242, the PBX's that support MWI via DSS1 or PMP-connection according to ETS 300 650. The configuration depends on the telephone system. Please contact the ixi-UMS Support for the facility.

Message Waiting Indication

Incoming voice-messages are sent to the user via e-mail in his mailbox. In addition, you can set a "Notification at the office telephone". The configuration required for the connection depends on the telephone system used and the ISDN protocol can not be set up via WebConfig in this version. Please refer to the manual and contact ixi-UMS support.

C Help

6.4.2 System Settings

This can affect the basic behavior of ixi-UMS Business for accepting and sending ixi-UMS Messages.

6.4.2.1 Service Mapping

By default, ixi-UMS Business accepts all incoming calls, regardless of whether it is a fax or a voice call. By means of the service allocation, services can be assigned to individual "DDI" or dial-up blocks (wildcard = *).

🗟 Servic	Service Mapping 😯 Help				
You can a and/or Vo from the	ossign sing bice. For D PBX to ixi	gle DDI numbers or a IDI you must type in t -UMS Business.	range of he recip	f DDI to the vient numb	service Fax er as signaled
DDI	Servio	e			
5478	Fax		Edit	Delete	
*	Fax an	d Voice	Edit	Delete	
Add		Service Mapping e	entry		х
Save Se	ervice	DDI: 5478			
	-	☑ Fax □ Voice			
					OK Cancel

Click "Add" to set an extension or number range for a service.

Fax: Switch to receive fax mode.

Voice: Switch to receive voice message mode. **Fax and Voice**: Detect fax or voice transmission and switches to appropriate mode automatically.

The "DDI" must be entered as the destination call number is transmitted from the telephone system to ixi-UMS Business.

If the telephone number is transmitted in the E.164 format, the E.164 telephone number must be entered here.

6.4.2.2 Send Options

You can specify how often (1-5) ixi-UMS Business should attempt to send a ixi-UMS message. It should be noted here that the number of redials should not be too high for a large fax volume.

Send Options		😮 Help		
You can set how often ixi-UMS Business should try an ixi-UMS message to dispatch and give the time window for the dispatch of ixi-UMS messages with low priority.				
Number of retries:	2	~		
Time window for sending low priority messages				
Start:	02:00	\sim		
End:	05:00	~		

Number of retries

Determines how often ixi-UMS Business tries to send a message. When entering two retries (see screenshot above), the message is sent 3 times all in all.

Faxes with low priority are delivered during the determined time window

Start:

Determines the start time of the time window.

End:

Determines the end time of the time window.

6.4.2.3 Archiving

Activates and deactivates the archiving of faxes, voice messages and SMS. If archiving is active, users can open, print, and save ixi-UMS Messages via the ixi-UMS Web Journal. Otherwise, only the transmission information is available.

This setting is always enabled and can't be disabled if you selected "<u>Store ixi-UMS Messages only locally</u>". The files are stored in the journal data base.

This is saved every 1st of the month, with the entries of the last 30 days remaining in the journal.

Archiving	🕑 Help
If the sent and received ixi-UMS Messages are to be available on the ixi-UMS Business Server, you must enable archive This is absolutely necessary if these should be available to users in the ixi-UMS Web Journal. Entries of the journal database and "archived" files older than 30 days are moved to a backup every 1st of the month.	ing.
If the e-mail sender address of an outgoing ixi-UMS Messsage is not found in the LDAP directory the ixi-UMS Messages deleted and the default recipient is notified. These deleted messages can be archived in the folder "\SMTPIn\Error".	s are

If the e-mail-sender adress of the outgoing UMS message is not find in the ldap user database, the UMS messages are deleted and the default recipient is notified.

Optionally, you can **archived the deleted ixi-UMS-message** in the installation directory\ixi-UMS SMTP Connector\SMTPIn\Error.

This setting is recommended if ixi-UMS Business is not connected to a mailserver.

6.4.2.4 ProCall 6 Integration

ixi-UMS Business provides user web-based pages for voice-mailbox configuration and the ixi-UMS Web Journal. These pages can be integrated into the "Custom Tabs" of the ProCall Client. See: <u>Setting up ixi-UMS web pages</u>

In order to save users from additional logons, the logon can be performed automatically via the "Windows login" if a ProCall 6 server is installed **and** Active Directory is <u>used for user management</u> for ixi-UMS Business and ProCall .

B ProCall Integration		🕑 Help
The ixi-UMS Business Portal can If Active Directory is used for use	also be used in ProCall "Custom Tab". For details see the manual. er management you can use a single sign on mechanism.	
✓ Enable ProCall integration fo UCServer Host:	r Single-Sign-On ucserver.domain.net Find in LAN	
Save	Test connection	

Activate "**ProCall 6 - Integration for Single-Sign-On**". You can now enter the UCServer via "Search on the network" or the computer name / IP address directly.

Using "Search on the network" the UCServer is queried via "Broadcast" and DNS and you can select the computer.

Search for UCServer	×	
Searching the LAN for UCServers	Search for UCServer	×
	Select the hostmane of you UCServer. Make sure it is al teast version 6. If your UCServer 6 is not in this list please enter it manually.	*
	ОК Сал	cel

Select the computer name and click "OK".

If the UCServer can not be determined, you must enter the computer name/IP address in the WebConfig.

Optional the ixi-UMS Business can use HTTPS to connect with the UCServer. Please also see the additional information: <u>Configure ixi-UMS Webseiten</u>
6.4.3 ixi-UMS Business Portal

In ixi-UMS Business all web applications are available in the <u>ixi-UMS Business Portal</u>. In the ixi-UMS Business Portal the <u>ixi-UMS</u> <u>Web Journal</u>, the <u>ixi-UMS User Information</u> and the <u>ixi-UMS Voice-Mailbox configuration</u> can be made available to the user.

The users must log on to the ixi-UMS Business Portal with their e-mail address and the LDAP password.

The ixi-UMS Voice-Mailbox configuration is automatically displayed in the ixi-UMS Business Portal when the answering machine function is activated.

Whether the ixi-UMS Web Journal and/or the ixi-UMS User Information is displayed can be determined.

ixi-UMS Business Portal	^
Web-Journal	😮 Hilfe
Legen Sie fest, ob das ixi-UMS WebJournal für Ihre Benutzer im ixi-UMS Business Portal zur Verfügung steht. ☑ ixi-UMS Web-Journal bereitstellen	
Benutzerinformation	Hilfe
Legen Sie fest, ob die ixi-UMS Benutzerinformation für Ihre Benutzer im ixi-UMS Business Portal zur Verfügung st 🗹 ixi-UMS Benutzerinformation bereitstellen	eht.

The link to open the ixi-UMS Business Portal can be sent with the "Infomail".

Note:

If the users are managed in the supplied ixi-UMS user administration, a password must be assigned.

7 User Management

In user administration, users can be created and/or configured for ixi-UMS Business, depending on the configuration.

ixi ixi-UMS 7 Business Configur. 🗙	+	- 🗆 ×
ixi-UMS 7 Busines	s Configuration	en 🗸 Logout
Configuration User Man	nagement Monitoring	
User Infomail Links		
Overview		Enabled: 2 Licensed: 25

In addition, all relevant information for the users can be defined in the "ixi-Infomail" and sent by e-mail.

7.1 User overwiew

Regardless of whether you store the user data (<u>in Active Directory</u> or in <u>the ixi-UMS User Management</u>), the ixi-UMS properties of the users are entered in the user administration integrated in ixi-UMS Business. The available options depend on the used LDAP database.

The configuration options and funktions in the menu line and the user overview depends of the used LDAP-user data base.

Users export / import

This option is only available if users are entered in the <u>Integrated ixi-UMS User Management</u>. The entered users can be exported with all settings and imported into a new installed ixi-UMS Business e.g on a new server.

This operation is not required if the existing ixi-UMS Business is updated.

Note. When users are imported, all existing users are deleted

Anzahl der lizenzierten Benutzer

You will see the number of licensed users and the number of activated users. If the number of activated users exceeds the number of licenses (eg because a license has been changed), this is displayed when opening the user administration. In this case, the first users read out when opening the configuration interface are deactivated.

Add user If you <u>selected</u> "Integrated ixi-UMS User Management", you must create all ixi-UMSusers <u>by yourself</u>.

User	Infomail L	inks		
Oven	view			Enabled: 4 Licensed: 10
I	mport users Exp	ortusers		Search Add user 🛛 Help
	Display Name	E-Mail / Login	Telephone	Fax ao
-	John McMarrow	John.McMarrow@domain.net	+49 30 789544651	+49.30.7895445651 🖉 🧷 🖬
-	Frank Smith	Frank.Smith@domain.net	+49 30 789544657	Click to unlock and generate a new PIN.
-	Maria Buster	Maria.Buster@domain.net	+49 30 789544656	+49 30 7895445656 \infty 🖉 📋 🖂 🗸
-	Samantha Filly	Samantha.Filly@domain.net	+49 30 789544653	Generate a new password and send by e-mail
*	Stephan Vossert	Stephan.Vossert@domain.net	+49 30 789544654	Send info mail

Overview

The overview shows the status activated $\frac{1}{2}$ /deactivated $\frac{1}{2}$ for each user on the left. The buttons on the right depend on the LDAP database:

	Send ixi-Infomail:
	With the "Infomail" you can send all needed information to send and reveive Fax- and SMS messages to the users.
	Send Passwordmail (with Integrated ixi-UMS User Management)
	Create and send the user password for login at the ixi-UMS Web Journal and ixi-UMS voice-mailbox configuration. The
	password is re-created with each e-mail.
Î	Delete user (with Integrated ixi-UMS User Management)
0	Edit the user objekt, edit and set the properties for ixi-UMS settings (Fax/SMS) und for ixi-UMS voice-mailbox
2	Voice-mailbox status (see below)
\otimes	unlock the locked voice mailbox and send a new PIN to the user via e-mail.

Note: E-mails can only be sent when the <u>connection to a mailserver</u> is established.

Access level to the voice-mailbox

The displayed states correspond to the configuration of the user. If the voice mailbox has been blocked by several incorrect PIN entries, this can be enabled here and a new PIN can be created.

00	Voice-mailbox is disabled
X	Only voice-mailbox - no login via telephone
ð	Voice-mailbox with login via telephone - no remote inquiry
2	Voice-mailbox, login via telephone and remote inquiry via telephone
\odot	The voice mailbox has been blocked by entering the wrong PIN several times.
	When you click on the button, it is unlocked and a new PIN is sent by e-mail to the user.

More information about setting up and editing users for ixi-UMS Business is dependent on:

Save user data in ActivDirectory

Save user in ixi-UMS Business User Management

7.1.1 User in ixi-UMS Business

If you have <u>selected</u> "integrated ixi-UMS User Management", you must create all users yourself. You can edit \checkmark , delete **i** and create an e-mail with a new password \bowtie for each user.

The user needs the password to log on to the "<u>ixi-UMS Web Journal</u>" and the "<u>ixi-UMS Voice-Mailbox Konfiguration</u>". If both websites are not used, the creation of a password is not required. You can also send the access data to the users with the "<u>Infomail</u>". Also in this case, the password will be created now for EVERY E-mail!

Please note: A new password is generated each time a new "password mail" is sent. **Note:** E-mails can only be sent when the <u>connection to a mailserver</u> is established.

During and after the creation of the users, you can set the user properties for the <u>ixi-UMS properties</u> (Fax / SMS) and optionally for the <u>ixi-UMS voice mailbox</u>.

Add/edit user

Sie können in der Übersicht über den Button "Benutzer anlegen" einen neuen Benutzer erstellen oder über den Button einen vorhandenen Benutzer editieren.

You can create a new user in the overview by clicking on the "Create user" button $\frac{\text{Add user}}{\text{or edit an existing user using}}$ or edit an existing user using the \mathcal{O} -button.

Add User			×	Required fields that are not filled in are displayed in red.
General ixi	-UMS Settings	ixi-UMS voice-mailbox		The Display Name is made up of the entered first name and surname.
🗹 Enable ixi-UMS	for this user		🕑 Help	E-Mail/Login
Name	John	McMarrow		The default e-mail address must be entered for each user.
Display Name	John McMarrov	v		All UMS-messages will be sent to this e-mail address.
E-Mail / Login	John.McMarrov	w@domain.net		

With this e-mail address, the user must also log on to the web-based pages for the <u>ixi-UMS Web Journal</u> and <u>ixi-UMS Voice-mailbox Configuration</u> also.

Add User	×		
General ixi-U	IMS Settings ixi-UMS voice-mailbox		
🗹 Enable ixi-UMS f	or this user 😢 Help		
Name	John McMarrow		
Display Name	John McMarrow		
E-Mail / Login	John.McMarrow@domain.net		
Password	Set user password		
Telephone	+49 (30) 789451526 Wrong		
Telephone (other)	+49 30 789451526 Correct		
Fax	+49 30 789451 5526 Wrong		
Fax (other)	+49307894515526 Correct		
Mobile phone	0176 84654545		
Home telephone	Home telephone		
Company	Company		
Department	Department		
Street	Street		
City	Pos! City		
	Close Save & Close		

Password:

The password is required for the login to the <u>%</u> IXI-UMS%> Web Journal and ixi-UMS Voicemailbox Configuration

The password is automatically entered or renewed by sending a "Passwordmail" from the <u>user overview</u>.

Telephone number

Telephone number (Other)

A phone number that can be evaluated for ixi-UMS Business is only required if you use

- the voice mailbox function "<u>Shared voice</u> mailbox number"
- login on the Phone without PIN
- notification per <u>MWI</u>.

Fax number

Fax number (Other)

Here you must enter the recipient number for which the user should receive the ixi-UMS messages (fax and voice).

Two receiver numbers can be assigned to each user.

The data for company, department and the address can be evaluated for the <u>coverpage</u>.

Please note:

The phone number to be evaluated by ixi-UMS Business must be entered in one of the following formats:

+49 8142 47990	One blank space between country code and area code as well as between area code and connection
	number
+49814247990	without spaces

Basically: No () - / or other characters may be included.

7.1.2 User in Active Directory

If you have selected "User management in Active Directory" in the <u>ixi-UMS Business configuration</u>, the users from the Active Directory are displayed and you can edit \checkmark the user to configure the ixi-UMS properties. You can also enter/change the numbers.

To send and receive ixi-UMS Messages, the recipient numbers and the default e-mail address **must be present per user**.

User	×		
General ixi-U	MS Settings ixi-UMS voice-mailbox		
🗹 Enable ixi-UMS fo	or this user 😮 Help		
Name	Frank Vollmer		
Display Name	Frank Vollmer		
E-Mail / Login	vollmerf@bak2017.net		
Password	Set user password		
Telephone	+49 (30) 789456456 Wrong		
Telephone (other)	+49 30 789456456 Correct		
Fax	+49 30 789456 5456 Wrong		
Fax (other)	+49307894565456 Correct		
Mobile phone	+49 173 8182840		
Home telephone	654654654		
Company	Company		
Department	Department		
Street	Kundenstrasse		
City	88888 kundenort		
	Close Save & Close		

E-Mail:

The default e-mail address **must be** entered for each user.

All UMS-messages will be **sent to this e-mail address.** With this e-mail address, the user must also log on to the web-based pages for the <u>ixi-UMS Web Journal</u> and <u>ixi-UMS Voice-mailbox Configuration</u> also.

Telephone number / Telephone number (Other)

A phone number that can be evaluated for ixi-UMS Business is only required if you use

- the voice mailbox function "<u>Shared voice mailbox</u> <u>number</u>"
- login on the Phone without PIN
- notification per <u>MWI</u>.

Fax number / Fax number (Other)

Here you must enter the recipient number for which the user should receive the ixi-UMS messages (fax and voice).

Two receiver numbers can be assigned to each user.

Mobile phone number

This is only evaluated when sending SMS messages. The prerequisite is that the SMS provider supports the function "individual senders".

The data for company, department and the address can be evaluated for the <u>coverpage</u>.

Please note:

The phone number to be evaluated by ixi-UMS Business must be entered in one of the following formats:

+49 8142 47990	One blank space between country code and area code as well as between area code and connection
+49814247990	without spaces

Basically: No () - / or other characters may be included.

7.1.3 ixi-UMS Settings

Here the sender information, permissions and the coverpage of the user are defined.

Fax sender number:

This is the number that appears in the header of the fax being sent. This is usually an extension. This is then combined with the <u>Sender ID of the ixi-UMS Business</u>.

Example:

In ixi-UMS Business is entered as Sender ID: +49 30 789524 (Will be displayed here)

The user is entered as extension: 3579

The header is printed on the fax: +49 30 7895243579

User			×	
General	ixi-UMS Settings	ixi-UMS	voice-mailbox	
Settings for s	ending ixi-UMS mess	ages	😮 Help	
Fax sender n	umber			
+49 30 456	78 371			
ISDN origina	ting address (optiona	I)		
Only requi	red if different from th	ie fax sende	er number	
Cover page				
DE_Mit_A	osender		~	
Fax permissi	ons			
national			~	
Max. number of pages per fax				
System de	efault			
10			* *	
SMS permissions				
system de	fault		~	
		Close	Save & Close	

ISDN originating address:

This is the "Calling Party Number", which is signaled for outgoing UMS messages for this user to the telephone system. You only need to enter something here if the ISDN (D-channel) information must be different from the entered fax sender number.

This **is not the "sender ID"** that is printed in the headers of the fax message.

Cover page:

If nothing is entered here, the <u>cover page selected</u> on the ixi-UMS Business server is taken.

Only if the user is to have an individual cover (different from the one <u>defined in the server</u>), specify the directory name of the coverpage subdirectory.Here, you specify the directory name of a Coverpage subdirectory. This directory must contain the fax cover sheet and layout for outgoing UMS messages. See also <u>Creating a Coverpage</u>

Fax permissions:

This allows you to set how far a user may send fax messages.

If you select "System Settings", the <u>default</u> <u>permission</u> set at the ixi-UMS Business server is valid.

Max. number of pages per fax:

You can set the maximum number of pages per fax in <u>Outbound fax messages</u> in the ixi-UMS Business server configuration. If the user wants to send a fax with more than the number of pages specified on the server, he receives an error message.

If **System default** is selected for the user, the default is valid. Remove the check box to give the user an individual number of pages per fax.

SMS permissions:

This can be used to set whether the user is allowed to send SMS messages. If you select "System Settings", the <u>default permission</u> set at the ixi-UMS Business server in "SMS Setting" is valid.

7.1.4 ixi-UMS Voice-Mailbox

To enable users to use an ixi-UMS voice mailbox, the "Voice-mailbox" function <u>must be activated</u> on ixi-UMS Business Server. The basic settings can be made globally on the ixi-UMS Business server and are valid for all users when "System default" is selected in the configuration. It is only necessary to enter user-specific settings in the user administration. If the Voice-mailbox is deactivated for a user, the caller receives a corresponding announcement and can not leave a message. Set an authorization level if it is different from the <u>settings on the ixi-UMS Business server</u>.

User				×
General ixi-U	MS Settings	ixi-UMS v	voice-mailbox	
☑ Voice-mailbox er	abled for this	user (only if	enabled globall	ly) 😯 Help
 Access level to the voice-mailbox System default Only voice-mailbox - no login via telephone Voice-mailbox with login via telephone - no remote inquiry Voice-mailbox, login via telephone and remote inquiry via telephone 				
If no PIN is enter sending of the w Unlock and/or	ed it will be ge elcome mail. create new PII	nerated duri	ing creation and	i
PIN		·		
Login from th	e office phone	without ent	ering the PIN	
IMAP login	IMAP login			
IMAP password	IMAP passwo	ord		
Notification at the office phone via "Message Waiting Indicator" (MWI) System default Off Enabled				
	Send Welcor	ne Mail	Close Save	e & Close

System defaults:

The settings on the ixi-UMS Business server are valid

Only Voice-mailbox:

The user can only set up his voice-mailbox via the browser-based ixi-UMS voice-mailbox configuration.

Voice-mailbox with login via telephone

The user can log in by phone, recording his/her announcements, and make all profile settings.

Voice-mailbox, Login via telephone and remote inquiry:

The user can log in, make the profile settings, and listen to his messages.

This setting is not available if you selected "<u>Store</u> <u>ixi-UMS Messages only locally</u>".

PIN:

The PIN is required for login on the phone. If no PIN is assigned, the PIN is automatically assigned when sending the <u>welcome mail</u>

If no welcome mail is sent, the PIN is default set to 12345.

Unlock and / or create new PIN

If the voice mailbox has been blocked by entering the <u>wrong PIN several times</u>, this can be unlocked here.

If ixi-UMS Business is <u>connectet to a mail system</u>, a "<u>Welcome mail</u>" will be automatically sent the next time you call to the voice mailbox number or if you send the mail via the Button "**Send Welcome Mail**"

If a (new) PIN is stored, this is entered in the mail, if the field is empty, a new PIN is generated.

By default, the users of each phone can select their voice mailbox number and log in using a PIN input.

If "Login from the office phone without entering PIN" is activated, the user can connect his voice telephone with his voice mailbox without a PIN.

The office phone is the telephone number entered in the LDAP database under "telephone number".

MAP login and IMAP password are essential for remote enquiry of messages by telephone. This setting is not available if you selected "<u>Store ixi-UMS Messages only locally</u>".

IMAP login	domain\user name	
IMAP password		
Notification at the	office phone via "Mesage Waiting Indicator" (MWI)	
System default		
 Enabled 		
	Close Save & Clo	se

If a Microsoft Exchange Server as mail server and Active Directory is used as a user database, only the (Windows) password must be specified.

The users can store these data themselves via the web-based ixi-UMS voice-mailbox configuration.

In order to use the **notifications at the office telephone by means of "Message Waiting Indication"**, you must make the <u>corresponding settings</u> in the ixi-UMS Business configuration.

The user is then informed of incoming voice messages via MWI.

If you set it in the ixi-UMS Business server configuration, the user can change this setting in the ixi-UMS voice mailbox configuration.

Note:

In order to inform the user via MWI, his telephone number must be entered in the user administration in the format: +49 8142 4799555.

8 Infomail

You can use the ixi-UMS Information Mail to inform users about the needed information for sending and receiving ixi-UMS Messages and also about the login informations to the ixi-UMS Business Portal.

User	Infomail	Links	
UMS Ir	formation		
Con	tent		😢 Help
Usir and	ng the ixi-UMS in receive UMS m	Iformation mail you can inform your users about the possibilities they ha essages and how they can use these functions.	we with ixi-UMS Business to send
Plea mai	Please note that information about the availability and usage of the ixi-UMS Voice-Mailbox is sent as a separate "welcome mail".		
The	ixi-UMS Inform	ation mail can be sent to the users in the user management.	

In the configuration you can define the content and the entered data. You can send the e-mail per user from the overview of user administration.

🔚 🕤 🕚 🛧 🤚 🐨 🚽 Information on ixi-UMS Business - Nachricht (HTML)	T			×	
Datei Nachricht Hilfe Q Was möchten Sie tun?					
Di 18.08.2020 11:12 ixi-UMS Business <ixi_ums_business@bak2017.net> Information on ixi-UMS Business</ixi_ums_business@bak2017.net>					
				^	
Welcome John McMarrow to ixi-UMS Business					
With ixi-UMS Business, you are able to receive and / or send different message types. In this e-mail y the functions available and how you can use them.	vou will be	e informe	ed abou	t	
Receiving ixi-UMS Messages					
You can receive these message types:					
Fax messages Voice messages (Note the information in the ixi-UMS Voice-Mailbox welcome mail)					
Your number for receiving ixi-UMS Messages is:					
+49 30 7895445651					
All ixi-UMS messages that have been sent or received, as well as the delivery reports can be accessed:					
with your default e-mail client in the ixi-UMS Web Journal which is part of the ixi-UMS Business Portal.					
Sending ixi-UMS Messages					
For sending ixi-UMS messages you can use this client:					
your default e-mail client					
An ixi-UMS message is addressed in the format <number>@<service.net>. Example: <u>+49307895449112@ixifax.com</u></service.net></number>					
4				Þ	

Please note that the availability and use of the ixi-UMS voice-mailbox will be sent in a separate "welcome message".

Define Content and informations

You must specify which information should be contained in the e-mail. Where this information should be read out, or which information the user is to receive, you specify separately.

General Content:

Select the content of the e-mail wich will be send to the users.

The first item depends on the <u>user database</u>.

- If you manage the users in the integrated ixi-UMS user management, the ixi-infomail can also be used to <u>create the</u> <u>password</u>. The ixi-infomail contains the user's e-mail address and the (newly generated) password.

- If the users are managed in Active Directory, only the user's e-mail address is added with a reference to the Windows password to be used.

Specify which general content shall be included in the e-mail.			
General Content	✓ Information about the ixi-UMS Busines Portal		
	✓ ixi-UMS number		
	✓ Addressing four outbound messages		
	✓ allowed attachments for fax messages		
	☑ ixi-UMS user manual as PDF attachment		
	✓ Link to the ixi-UMS user manual as HTML on the server		

ixi-UMS Business Portal

If the users should use the ixi-UMS Business Portal, the link and the required login information can be sent to the users.

Note: The link to the ixi-UMS Business Portal is also sent with the <u>welcome message</u> for the ixi-UMS Voice-Mailbox.

The information about the login data depends on the set user database.

- If you manage the users in the Integrated ixi-UMS User Management, the <u>password is created</u> and sent to the user when the ixi-Infomail is sent. The ixi-Infomail contains the e-mail address of the user and the password (generated each time).

- If the users are administered in Active Directory, only the user's e-mail address is inserted with reference to the Windows password to be used.

Specify what information is provided about the ixi-UMS Business Portal.

☑ Link to the ixi-UMS Business Portal

✓ Information about logging on to web applications

ixi-UMS Number:

Select from which field the <u>recipient number</u> of the users should be read out.

Select from which field(s) the recipient number for inbound ixi-UMS messages is read.

ixi-UMS Number

Fax Number Fax Number (other)

Send messages with:

If a mailserver is available in the <u>existing IT environment</u>, the user can use the default e-mail client to send ixi-UMS Messages. If outgoing ixi-UMS Messages are not sent via an existing mailserver, the ixi-UMS Client Tools can be installed at the workstations. These optionally provide the ixi-UMS SMTP client to send ixi-UMS Messages directly to the ixi-UMS Business system.

For more information on the ixi-UMS Business Client Tools, please refer to the ixi-UMS Business Client Tools Installation Guide and the ixi-UMS user guide.

Select the clients that will be announced to be used for sending and receiving ixi-UMS messages.			
Send messages with Receive mesages with	 ● default e-mail client ○ ixi-UMS SMTP client ○ no sending ✓ default e-mail client □ ixi-UMS web journal 		

Receive messages with:

Depending on the <u>connection to an e-mail system</u> and the configuration of ixi-UMS Business, the user has different possibilities to access his received ixi-UMS Messages and confirmations.

If the <u>archiving</u> of ixi-UMS Messages is activated, users can access the ixi-UMS Messages via the ixi-UMS Web Journal.

If you have set "<u>Store ixi-UMS messages only locally</u>", the users can only use the ixi-UMS Web Journal to access the ixi-UMS Messages.

Further informationa are required for the sending and receiving of ixi-UMS Messages.

Services: Specify the types of ixi-UMS Messages that users can send.
SMS and TTS messages can only be sent
Adressierung: This entry is only relevant if the ixi-UMS mail is sent via a mailserver. The addressing is defined in the <u>settings of the ixi-UMS</u> <u>Business</u> system and must be entered accordingly in the mailserver.
If the ixi-UMS SMTP Client is used to send ixi-UMS Messages, the addressing is fixed when installing the ixi-UMS Business Client Tools.

Server address:

The URL for accessing the ixi-UMS Business Portal and the user manuals is automatically generated and communicated to the users in the ixi-UMS Infomail and the welcome message. If the ixi-UMS 7 Business has several IP addresses or if a specific FQDN is to be used explicitly for the call, the base URL can be changed. Important:

If the ixi-UMS 7 Business is <u>set to HTTPS</u>, the FQDN entered in the <u>certificate</u> must be specified.

The link to the ixi UMS Business Porta info mail. If the ixi-UMS Business serve the base URL can be adjusted.	and the user manuals is included in the welcome mail and cann be included in the rhas multiple IP addresses or the ixi-UMS Business Portal shall be called via FQDN
Important: If https is used the comput	er name/FQDN entered here must be contained in the certificate.
 Use default: http://10.10.10.188:8890 Enter base URL: 	
https://ixi-UMS-Server	×

Save the desired settings and <u>send the ixi-Infomail</u> to the users. You can change the selection at any time and save it again. The content of the e-mail is taken over immediately on saving. No services have to be restarted.

9 Links

Here you can see the currently valid links for the web-based user interfaces. The link to the ixi-UMS voice-mailbox configuration is contained in the <u>welcome mail</u> and the link to the ixi-UMS Web Journal can be added to the Infomail.

ixi-UMS 7 Business Configuration				
Configuration	User Management	Monitoring		
User Infomai	l Links			
Links 😧 Help				
Send these links to your users if you want them to use the web applications. The link for ixi-UMS Business Portal is contained in the welcome mail and can be added to the ixi-UMS Infomail.				
ixi-UMS Business Po	ortal	http://10.17.10.170:8890/umsportal/		
Record global anno	ouncement	http://10.17.10.170:8890/admRecGlobalAnc/START		

The link to record the "Global Announcement" can be sent via the configuration in the ixi-UMS Business server.

10 Monitoring

The current operations can be monitored in ixi-UMS Business under the "Monitoring" menu item.

xi-UMS 7 Business Configuration		
Configuration	User Management Monito	ring
Lines Queue	Journal Services Logg	ing About
Lines		😮 Help
Status	Description	
Channel 1	Waiting for incoming call	
Channel 2	Ready	

10.1 Channels

The line view gives you information about the current status of the lines

Lines	Queue	Journal	Services	Logging	About	
Lines						😮 Help
Status		Desc	cription			
🗲 Char	nnel 1	Sending[Remote Address: 0895648754154][Transmitted bytes: 7168]				
→ Char	nnel 2	Incoming call, not yet connected[Remote Address: 0895648754154][Transmitted bytes: 0]				

The following status are possible:

Channel 1 Inaktiv	Channels are initialized
Channel 1 Start	Channels are started
Channel 2 Ready	Idle state
Channel 1 Waiting for incoming call	Idle state
Channel 1 Dialing[Remote address:0049162 ⁴	Dialing
Channel 2 Sending[Remote address:004981	Sending of data , Information about the destination number and the bytes already transmitted
E Channel 1 Incoming call, not yet connected[Remc	A call comes in and is waiting to be accepted
Channel 1 Receiving[Remote address:349	Reception of data, Information about the sender number and the bytes already transmitted

10.2 Queue

In the "Queue", all the outbound messages to be processed are displayed according to their priority.

-UMS 7	Business Conf	iguration				en 🗠 Log
onfiguratio	n User Management	t Monitoring				
nes Que	ue Journal Servi	ces Logging	About			
ueues						😮 He
Send test me	ssage					
High Priority	r (2 Jobs)					^
Job Type	Scheduled Send Time	Recipient	Sender	Job State	Tries	
🗎 Fax	11.8.2020 14:42:32	+498142483850	5651	Waiting	0	Delete
🗎 Fax	11.8.2020 14:42:32	48388456	5654	Waiting	0	Delete
Normal Prio	rity (2 Jobs)					^
Job Type	Scheduled Send Time	Recipient	Sender	Job State	Tries	
🖻 Fax	11.8.2020 14:33:28	+3956487545421	5656	Waiting	0	Delete
🗯 SMS	11.8.2020 14:33:28	+39321567878	5653	Waiting	0	Delete
Low Priority	(2 Jobs)					^
Job Type	Scheduled Send Time	Recipient	Sender	Job State	Tries	
🗎 Fax	12.8.2020 2:00:00	48388456	5654	Waiting	0	Delete
🗎 Fax	12.8.2020 2:00:00	48388456	5651	Waiting	0	Delete

The columns show the following information:

Job Type	Indication about the type of messages (Fax, Voice, SMS)				
Scheduled Send Time Information about the time of the next try. Messages with low priority are sent in					
	window				
Recipient	To which number the message is sent				
Sender	Sender of the message				
Job State	Information about whether the job is done or is waiting to be processed				
Tries	Number of transmission tries				
Delete	Delete the job file from the queue (Only available in the "Waiting" state)				

Send test message

Send test message

With the button you can create outgoing/sending ixi-UMS Messages for the services Fax, SMS and Voice. The sending result or the reason for not sending can be viewed in the journal.

Send test message		×
Test messages are send using high priority. Sender address		
5651		
Recipient address		
06978454654		
Jobtype		
Fax		~
Voice		
SMS		
	Send	Cancel

It is mandatory to enter a recipient number and to specify the fax, SMS or voice service to be used.

Note:

Depending on the PBX configuration and type it is not allowed to initiate an outgoing call without an ISDN sender number. If this is the case, a (ISDN) sender number must be entered in the corresponding field.

10.3 Journal

All the sent and received ixi-UMS messages are logged in the journal.

Please note:

ixi-UMS Business regularly performs a backup of the journal database. The journal database will be moved files older than 30 days to a backup directory every first month.

By clicking the column headings, you can sort the entries ascending / descending. You can also specify a time range, or search for a subject or a remote.

ixi-	UM	IS	7 Bu	isines	s Config	uration			en 🖌 Logout
Col	nfigu	irati	ion	User Ma	nagement	Monitoring			
Lin	es	Qı	ueue	Journa	Services	Logging	About		
Jou	urnal								😮 Help
5	60 Ent	ries	per page	e 🗸 all	entries 🗸	Refresh		Search	
≓:	0 ©© 0	60	Transmis	sion time 🛩	Sender Number 0	Recipient Numb	er ≎ Subject ≎	E-Mail Address 🗘	
÷	₪	×	12.8.2020	0 8:52:53	+49 30 7895445654	48388456	Important - please verify	frank.smith@domain.net	Show details
\rightarrow	1	~	12.8.2020	0 8:24:54	+493089564875415	4 +49 30 45678565	1 -	John.McMarrow@domain	Show details
\rightarrow	4 9	~	12.8.2020	0 8:14:52	+49815136856177	+49 30 45678565	1 -	John.McMarrow@domain	·· Show details
\leftarrow	ß	~	12.8.2020	8:09:56	+49 30 456785654	+4915166756157	Important Information	samantha.filly@domain.net	Show details
\rightarrow	d»	~	12.8.2020	0 8:23:45	+49815136856177	+49 30 45678565	1 -	-	Show details
\leftarrow	1	~	12.8.2020	0 8:24:54	+493089564875415	4 +49 30 45678565	1 Order via Fax	John.McMarrow@domain	·· Show details

Direction, type and transmission of the data are displayed in the first 3 columns:

\leftarrow	Direction: outgoing
\rightarrow	Direction: Incoming
0	Service Fax
œ	Service SMS
4 0	Service Voice, for incoming calls: Message recorded,
↓ »	Service Voice, for incoming calls: Message not recorded,
~	Transmission without errors
×	Errors occurred during the transmission
Ĉ	Service MWI

You can use "Details" to open the information on the individual ixi-UMS Messages.

If the option <u>Archive associated files</u> activated in ixi-UMS Business Server, you can open, print and save all SMS and fax messages include reports. Also you can save and listen voice messages.

🗲 🛅 Fax Outbound Detail View	×
Sender number	5656
Sender e-mail address	John.Smith@domain.net
Recipient	0003956487545421
Subject	Order via Fax
Transmission Time	17.8.2020 14:42:51
Remote station ID	+39 564 87545421
Priority	Normal
Number of Pages	1
B-Channel	2 (Controller 1)
Number of dial attempts	1
Status	Fax sent successfully
	Open fax (as PDF) Close

10.4 Dienste

The functions of ixi-UMS Business are divided into individual services. All services must be started for the complete function, including the local user administration. You can stop and start services for test purposes and troubleshooting.

Lines	Queue	Journal	Services	Logging	About		
Service	S					🕑 Help	
Status	Service						
•	Apache 2.4 (ixi-UMS Webse	erver)				
•	ixi-UMS Business Server Service						
•	ixi-UMS Business Rendering Start						
٠	ixi-UMS Busi	iness SMTP Se	rvice			Stop	
٠	ixi-UMS Busi	iness SMTP Ro	uter				
•	OpenLDAP [®]	2.4 (ixi-UMS us	ser database)				
٠	Firebird Serv	ver <mark>(</mark> ixi-UMS Jo	ournal database	2)			

Service	Functional overview				
Apache 2.4 (ixi-UMS Webserver)	Web server for the web-based surfaces				
	Provides the scripts for the voice mailbox				
ixi-UMS Business Server Service	Connection to the Capi / telephone system				
	Send and receive the messages				
ixi-UMS Business Rendering	Processing incoming and outgoing messages				
ixi-UMS Business SMTP Router	Send and receive the UMS messages to / from mailserver via SMTP				
ixi-Framework SMTP Router	Sending the welcome mail and messages answered / forwarded via the				
	telephone.				
OpenLDAP [®] 2.4 (ixi-UMS user database)	local user database				
Firebird Server (ixi-UMS Journal database)	Journal database				

10.5 Logging

. .

If problems occur with the function in ixi-UMS Business, some logs/traces can be created. You can evaluate most of the log files yourself. You can



gging		
Logging		😮 Help
Enable log and trace files for error diagnostics:		
Trace fax, voice and SMS transmission	o 🗟 👕	
☑ LDAP search	💿 🗟 🍵	
Connection to the mail server (SMTP)	💿 🗟 🍵	
Voice-mailbox	🕑 🗟 🍵	
and ixi-UMS voice-mailbox configuration	o 🗟 🃋	
☑ Voice-mailbox: Invalid PIN entered	o 🖻 🍵	
Notifiaction (MWI)	@ 🗟 👕	

Trace for fax and voice transmission

This switch activates several trace/logs:

The Fax/Voice-Data transmission trace should only be activated if problems with the ISDN connection and/or on the advice of the company estos GmbH.

This switch activates several trace / logs:

Туре	file name	Description
Fax/Voice-Data transmission	IFTRCx.txt	CAPI-Trace, Communication with PBX-System
voice transmission	VMLTRCx.txt	Transfer of the voice data to / from the UMS system
SMS	IFXSMS2Soap3.TXT	Communication with SMS provider via HTTP

This is a trace, which can only be evaluated by specially trained personnel. If the evaluation is carried out by the company estos, a PBX configuration sheet, which has been filled out by the corresponding TK-technician, is absolutely necessary! In addition, only the problem should always be contained in the trace, that is, It should always only one call, fax etc. "getraced". For VoIP connections please use the XCAPI trace.

For each channel, 4 log files are written. The first log file IFTRCx.txt is not overwritten after reaching 10 MB. The IFTRCxa.txt -IFTRCxc.txt files are created. When all files have reached the 10 MB, the files are overwritten, starting with the IFTRCxa.txt file. The IFTRCx.txt is retained.

In the log for the voice transmission, the operations of the answering machine are logged between the CAPI and the ixi-UMS Business system. This trace is only relevant to estos employees.

The connections to the selected SMS provider and any problems that occur are logged in the **SMS log**.

LDAP Search

This Log is enabled by default. LDAP queries are logged for the search and the search result for incoming and outgoing messages.

Connection to the mail server (SMTP)

SMTP communication errors between ixi-UMS Business and mailserver are logged.

Voice mailbox and ixi-UMS voice mailbox configuration

This log should only be activated in the event of an error.

In the log file for the voice mailbox, all LDAP processes and user inputs as well as scripts are logged.

The log for the "Voice mailbox: Invalid PIN entered" is always written if an incorrect PIN is entered or the mailbox is blocked.

Notification (MWI)

The creation and dispatch of MWI messages is divided into 3 steps.

- 1. LDAP search for receiver settings:
- ixiNotifierExpress.log
 Creation of the file: ModMWI.log in the ixi-UMS Business \ ixi-UMS Kernel \ RConn \ logs directory
- 3. Send the MWI (through the ixi-UMS Business server service): Displayed in the journal

These files can not be viewed here. They can only be downloaded as a ZIP package.

10.6 About

Here the installed ixi-UMS Business version and the licenses of the open source products used in ixi-UMS Business are displayed.

Lines	Queue	Journal	Services	Logging	About		
About i	About ixi-UMS 7 Business 2 Help						
Instal 7.01.0	led Version: .6						
License	s						
ixi-UMS	Business ma	kes use of Ope	n-Source softwa	are and compo	onents. The a	ssociated liceses can be read here.	
Apache h	ttpd 2.4 - https	://httpd.apache.	org				^
	Apache	License					
	Version 2.0	, January 2004					
	http://www.	apache.org/licer	ises/				
TERMS	AND CONDITIO	NS FOR USE, REF	PRODUCTION, AN	D DISTRIBUTION	I		
"Licen	sor" shall mea	n the copyright o	wner or entity au	thorized by			
the co	pyright owner	that is granting t	he License.				~
<						2	+

11 Additional Informations

11.1 Connection to PBX and phone numbers

An important point by the integration from ixi-UMS Business is the binding to the public telephone network. This binding over a PBX should be carried out by a TK engineer. On this occasion, it is about configuration of the PBX and connection near the PBX.

For the connection from ixi-UMS Business is necessary bintec elmec device for ISDN binding or a XCAPI for VoIP connections.

In order to find out how many B-channels you need, you must take into account the number of incoming and outgoing messages per day. You can use the following figures:

- A fax page takes 1 minute to be transmitted. Failures and retries included.
- One SMS-message takes only a few seconds to be transmitted and can be neglected in this calculation.
- Voice-massages should be treated like fax messages in this computation.

Another important thing that has to be kept in mind are the peak hours, e.g. in the morning when people start to listen to their new voice-messages or in the evening when marketing people might start fax campaigns.

Examples:

Example a)

- A company has only two employees,
- the task of these employees is to send a large amount of mail merge faxes every day (e.g. mailings).
- A mailing consists of 500 fax-messages à 2 pages (=1.000 pages)
- ixi-UMS Business Server configured with four B-channels.

A fax page needs 1 minute to be transmitted, in this case the transmission of the mailing would take 250 minutes using the 4 B-channels

Please bear in mind: In these 2 to 4 hours, no other messages can be sent or received, except one channel has been reserved for the reception, which prolongs the delivery time.

Example b)

- Company with 100 employees
- The services Fax and Voice are used
- About 1000 fax pages are send and received per day
- The faxes are sent and received mainly between 8 a.m. and 6 p.m.
- Every telephone shall get a call forwarding (when busy) to the ixi-UMS Business Server

Calculation Fax:

1.000 pages x 1 minute / page = 1.000 minutes = 16.6 hours

The delivery time for 1.000 fax pages with 1 B-channel would be about 16.6 hours. In order to be able to receive the faxes in the period between 8 a.m. and 6 p.m., at least 2 channels would be required.

During this period, no channel would be available for the feature Voice (voice box). Moreover, you have to take into account that the distribution of the send and received fax messages is not consistent.

Calculation Voice:

At the company, roughly every 15 minutes, a call is forwarded to the ixi-UMS BusinessServer. They want to make sure that there is always a free line available for the voice box.

In order to guarantee the availability of the voice box and the sending and reception of faxes for every user, at least 8 channels should be deployed.

For further information and calculation examples, please contact: <u>sales@servonic.com</u>.

11.1.1 Types of ISDN Accesses

For the connection from ixi-UMS Business near your PBX / NTBA you need a BRI – BASIC rate interface (also famously as a S0) connection. This permits a maximum number of 2 concurrent connections. The connection can be configured two different kinds:

• Point-To-Multipoint (PMP)

This mode can only be applied with S0 accesses. PMP means that you have a number of so called MSNs (Multiple Subscriber Number) available on the access for addressing end users. The number of MSNs depends on whether you have a Telecom ISDN (up to 10) access or a PBX ISDN access (limit depends on PBX). Each MSN represents the address of one end user on this access.

• Point-To-Point (PP)

Instead of MSNs, so-called DDI digits (Direct Dial In) are used to address end users. This means you have a main number for the access and a number of dial in digits which may follow after the main number (usually at least 2). For example with two direct dial in digits, 100 (00-99) end users can be addressed.

In many PBX's, Q-SIG offers most features in combination with ixi-UMS Business and the ixi-UMS Business Enhanced Voice Package.

Call number transfer to the ixi-UMS Business Server

For the operation of a server-based Unified Messaging Systems, the transfer of the **recipient** number and the **sender** number are relevant. With inbound calls, the call numbers are canonized by the ixi-UMS Business Server into a number in the international E.123 format according to ITU-T E.164 (international numbering plan).

In special cases, it may make sense to transfer the recipient number in international E.164 format. If so, this funktion <u>must be</u> <u>aktivated</u> in the ixi-UMS Business Server.

• Recipient number

The ixi-UMS Business recipient number should be transferred to the ixi-UMS Business Server as extension/MSN. The ixi-UMS Business Server <u>completes this to an E.123-standard number</u>.

• Sender number

With the sender numbers sent to ixi-UMS Business by the PBX, "NumberingPlan" (NP) and "TypeOfNumber" (ToN) information must be consistent with the format of the number itself.

Example:

A ixi-UMS message is received at the site in Munich from the sender number +49 89 123456. The transfer from the PBX / NTBA to ixi-UMS Business e.g. can be transferred via one of the following "information pairs" (NP/ToN):

NP (NumberingPlan)	ToN (TypeOfNumber)	Transferred Number
unknown	unknown/ISDN-E.164	089123456
ISDN - E.164	unknown/ISDN-E.164	089123456
ISDN - E.164	unknown/ISDN-E.164	12345
ISDN - E.164	national	8912345
ISDN - E.164	subscriber	12345
ISDN - E.164	international	498912345

())

When a number NP or (and) ToN "Unknown" is signaled by the PBX or the outside line, the internal number conversion rules of the ixi-UMS Business are activated. If "Remove outside line access" is selected, for example, the ixi-UMS Business Kernel can remove this. In every other case, these rules do not apply.

• Redirecting and Redirection Number

When the ixi-UMS Business with the inbound routing option global "voice-mailbox number" (Route-by-Redirection) shall be used, this must be transferred to ixi-UMS Business as:

with DSS1 Redirection Number, ETSI ETS 300 207

with QSIG divertingLegInformation, ECMA-174

• Call transfehr and callback with ixi-UMS Business

When the features transfer and/or callback shall be used, the following features must be supported in addition:

- ECT (ExplicitCallTransfer)
- HOLD
- Retrieve

• Additional information:

The service HOLD is needed to hold an active call in order to make the call transfer after having made a consultation call. Retrieve is needed when the consultation call or the call transfer was not successful in order to reactivate the held call.

Punkt-to-Multipoint (PMP)	Point-to-Point (PP), DSS1	Point-to-Point (PP), Q-SIG
HOLD/Retrieve (Call Hold, ETS 300 139)	KEIN ECT möglich	Path Replace ECMA 175/176
ECT (Explicit Call Transfer, ETS 300 367)		Call Transfer ECMA 177/178

0

If the PBX does not support the ECT or a PP must be deployed, the ixi-UMS Business Server can "emulate" this feature. Please turn to ixi-UMS Business support department. This features is only possible with the ISDN-board Dialogic DIVA Server BRI.

Remarks:

• In a lot of PBX's, Q-SIG offers the most features in combination with ixi-UMS Business. Because of this, we recommend to use the protocol Q-SIG with the deployment at a PP-connection.

11.1.2 Voice over IP

A connection of ixi-UMS Business via IP can be realized via H.323 or SIP. The ixi-UMS Business Server hereby can initiate calls via a gateway or a gatekeeper / proxy. Requirements for the connection via VoIP in order to guarantee the functionality of the single services of ixi-UMS Business:

Voice:

Fax:

Variant 1: T.38 Variant 2: "SoftFax" / "Fax pass trough" with RTP/RTCP with Codec G711 ALaw or µLaw, Clearchannel (no echo cancellation, no VAD, no ComfortNoise, etc.) RTP/RTCP with the Codecs G.711 ALaw or μ Law SMS via fixed lines: RTP/RTCP with Codec G711 ALaw or μ Law, Clearchannel (no echo cancellation, no VAD, no ComfortNoise, etc.)

Call number transfer to the ixi-UMS Business Server

For the operation of a server-based Unified Messaging Systems, the transfer of the recipient number and the sender number are relevant. With inbound calls, the call numbers are canonized by the ixi-UMS Business Server into a number in the international E.123 format according to ITU-T E.164 (international numbering plan).

In special cases, it may make sense to transfer the recipient number in international format. If so, this funktion <u>must be</u> <u>aktivated</u> in the ixi-UMS Business Server.

• Recipient number

The ixi-UMS Business recipient number should be transferred to the ixi-UMS Business Server as extension/MSN. The ixi-UMS Business Server completes this to an E.123-standard number.

• Sender number

With the **use of H.323**, the sender number information of the "NumberingPlan" (NP) and "TypeOfNumber" (ToN) sent to ixi-UMS Business from the PBX must be consistent with the format of the number itself.

Example:

A ixi-UMS message is received at the site in Munich from the sender number +49 89 123456. The transfer from the PBX / NTBA to ixi-UMS Business e.g. can be transferred via one of the following "information pairs" (NP/ToN):

NP (NumberingPlan)	ToN (TypeOfNumber)	Transferred Number
unknown	unknown/ISDN-E.164	089123456
ISDN - E.164	unknown/ISDN-E.164	089123456
ISDN - E.164	unknown/ISDN-E.164	12345
ISDN - E.164	national	8912345
ISDN - E.164	subscriber	12345
ISDN - E.164	international	498912345



When a number NP or (and) ToN "Unknown" is signaled by the PBX or the outside line, the internal number conversion rules of the ixi-UMS Business are activated. If ""Remove outside line access" is selected, for example, the ixi-UMS Business can remove this. In every other case, these rules do not apply.

In the **SIP-protocol**, the fields "NP/ToN" do not exist. The call number format always is "unknown".

With the use of SIP, the ixi-UMS Business must be set up in dependence of the transferred call numbers. Recommended is the transfer of the recipient number as "extension" (DDI/MSN) and the sender number as national (089 598741) or international (0039 1 6554788), this means always with prefix.

• Redirecting and Redirection Number

When the ixi-UMS Business with the inbound routing option global "voice-mailbox number" (Route-by-Redirection) shall be used, this must be transferred to ixi-UMS Business as:

- with SIP: SIP Diversion Header
- with H.323: H.450.3

• Call transfehr and callback with ixi-UMS Business

When the features transfer and/or callback shall be used, the following features must be supported in addition:

bei SIP:	bei H.323:
Standard SIP "INVITE" und "REFERE"	H.450.2 "Call Transfer supplementary service for H.323."
	H.450.4 "Call Hold supplementary service"

• Additional information:

The service HOLD is needed to hold an active call in order to make the call transfer after having made a consultation call. Retrieve is needed when the consultation call or the call transfer was not successful in order to reactivate the held call.

11.1.3 Call Number Transfer in E.164-Format

The ixi-UMS Business Server can <u>be activated</u> for the procession of call numbers in the international format E.164 (according to ITU-T E.164). In this case, neither information of the ToN are analyzed by the ixi-UMS Business Server, nor rules for the canonization are executed.

The call numbers must be transferred in the format <country code><area code><call number> (e.g. 4981424799585).

With outbound calls, for the CallingNumTypePlan" and the "CalledNumTypePlan" are passed on to the ixi-UMS Business Server: E.164/international

In the configuration, the following differentiations can be made:

	With inbound calls, all the call numbers are signaled to ixi-UMS Business in E.164-format:
	Recipient number (Called Party Number)
E.164 only inbound	Sender number (Calling Party Number)
	Redirection Number
	With outbound calls, ixi-UMS Business passes on the number to the CAPI in E.164 format:
E.164 only outbound	Recipient number (Called Party Number)
	Sender number (Calling Party Number)
Inbound and outbound	All the call numbers are transmitted in E.164-format, as described above.

11.1.4 MWI - Signaling

Basically, the MWI-service (address type "Alert") is used for the signaling of new messages by indication of a signal at the user's telephone. This is normally the light up of a signal lamp or the indication of a message at the telephone display.

Tthe following protocol properties are required, depending on the protocol:

- DSS1 MWI, ETSI ETS 300 650
- QSIG mWIActivate and mWIDeactice, ECMA-242
- VoIP/SIP Message Waiting Indication, RFC 3842
- VoIP/H.323 H.450.7 "Message Waiting Indication supplementary service"

In detail, the feature is dependent on which PBX is used.

XCAPI Configuration File View Help Image: Configuration	VoIP (XCAPI) In ixi-UMS Business no configurations required. The PBX-specific settings must be made in the VoIPconnect / XCAPI an the PBX.
Configuration Information Licenses Controller Cisco Gateway - 10.10.10.57 Fax CAPI 2.0 Audio Network CAPI 2.0 King Audio MWI (Message Waiting Indication) Cisco Callmanager compatible Prefix / Suffix Codecs Theorem and the filter	In the XCAPI, the type of signaling under "Supplementary Services" can be selected and set. You can find information on setting up telephone systems connected via VoIP on the <u>estos website for "Unified Messaging</u> <u>with ixi-UMS Business"</u> . (www.estos.de/produkte/ixi-ums-business) or ask ixi-UMS Support.
Modified XCAPI: 3.6.34.0 (¤70), CAPI2032.DLL: 3.1	

ISDN - Qsig und DSS1

Depending on the telephone system and its configuration, code numbers and/or prefixes must be defined, a user created. These configurations must be stored in a configuration file in ixi-UMS Business.

Because the configuration depends very much on the required values, please contact ixi-UMS support for setup.

11.1.5 Set-up bintec elmeg Media Gateway

To send and receive Fax/Voice/SMS a "CAPI" must be installed on the ixi-UMS-Server. The CAPI must support "Fax G3". This function are available in all bintec emleg products if a DSP-Module is built-in.

This chapter describes the configuration of a "bintec elmeg" media gateway for connection to ixi-UMS Business. As of today (07.2019), this manual is valid for all RT products and the be.IP 4 ISDN. The configuration interface depends on the installed firmware.

The "Remote-CAPI for MS-WINDOWS" (at least version 1.1.7 from 07.2015) from "bintec elmeg" must be installed on the ixi-UMS Business server.

ixi-UMS Business can be installed bevor or after the LANCAPI.

11.1.5.1 Requirement

1. Ein "bintec elmeg" with integrated DSP

In all RT-Produkts the DSP ist integrated ist. In the older R-Version the DSP can be build-in seperat.

pintec RT1202	Language English 🖃 🚺 View	V Standard Online Help	Logout	
Save configuration				
Assistants 👻				
System Management 🔹	Automatic Refresh Interval 60 S	econds Apply		
Status	9 Warning: System Password not o	changed!		
Global Settings	System Information			
Interface Mode / Bridge	Uptime	3 Day(s) 7 Hour(s) 15 Minute(s)		
Groups	System Date	Thursday, 2015 Jul 30, 15:56:48		
Administrative Access	Control Number	DN/DCM04/240202		
Remote Authentication	Serial Number	RN4BCM014240222		
Configuration Access	BOSS Version	V.9.1 Rev. 10 (Patch 3) IPSec from	2014/10/17 00:00:00	
Certificates	Last configuration stored	Thursday, 2015 Jul 30, 13:20:37		
hysical Interfaces 🔹 👻	Resource Information			
AN 👻	CPU Usage	0%		
/ireless LAN Controller 🛛 👻	Memory Usage	26.2/63.9 MByte (41%)		
etworking 🗸 🗸	ISDN Usage External	0 / 4 B Channels		
outing Protocols 🔹 👻	Active Sessions (SIF, RTP, etc)	0		
Aulticast 🗸	Active IPSec Tunnels	0/0		
	Modules			
VAN •	DSP Module	M 8 DSP V2 (0/8)		
'PN 🔻	Physical Interfaces			
irewall 👻	Interface	Connection Information	Link	
oIP	en1-0	10.10.10.13 / 255.255.255.0	0	
	en1-4	Not configured / Not configured	0	
ocal services 🗸	bri-0	Configured	0	
laintenance 🔹	bri-1	Not configured	0	
xternal Reporting 🗸 🗸	WAN Interfaces	-		
Ionitoring -	Description	Connection Information	Link	

The newest firmware should be installed.

Check the Router:

Open the Configuration and navigate to "System Management – Status". In section "Moduls" you can see the installed DSP modules. If this information not present you can't use this device with ixi-UMS

2. Outside Line

The PBX must be connected to an ISDN-Connection. Either directly to a NTBA/PRIMARY-MULTIPLEX or to a PBX The connection qualities must be known! (See ixi-UMS_TK-Konfigblatt. pdf)

Example: Investment connection (PP), Mehrgeräteanschluss (PM), protocol: DSS1 or Q-SIG (only by using Siemens/Unify PBX)

11.1.5.2 Configuration the Media Gateways

The following settings should be carried out compelling and/or the settings be checked. All in the following described settings can be carried out above the web Konfigurations surface in the view "standard".

🏉 bintec RT1202: CAPI Server - U	ser				
bintec RT1202	Language English 💌 🔭	View Standard 💌	Online Help	Logout	teldet Group Company

11.1.5.2.1 CAPI-Server User

Normally the user "default" is put on for the access to the CAPI. The user has no password Optionally you can put on a user with password to use the CAPI.

Open the menue in the Web configuration and navigate to "Local Services". Open the menue "CAPI Server", select the Tab "USER".

bintec RT1202	Language English 🔽 💓	View Standard 🗸	Online Help	Logout	teder Group Comp
Save configuration Assistants		User Options			
Svetom Managomont -					
Local Services	Liser Name	Access			
DNS	default	100000			
HTTPS	derault	V			
DynDNS Client					
DHCP Server		New			
Web Filter					
CAPI Server					
Scheduling					

Click on "New" and add a new User object.

Basic Parameters			
User Name	IXI-UMS ×		
Password	•••••		
Access	✓ Enabled		
OK Cancel			

The following settings had to go no matter whether you put on a new user or not:

Open with click on the Symbol 🙋 to open the properties of the user. Change to Tab **Options.**

<u>User</u> Op	tions <	
----------------	---------	--

Basic Parameters	
Enable server	Enabled
Faxheader	☑ Enabled
CAPI Server TCP Port	2662
	OK Cancel

Here you must enable the server and the Faxheader. Please don't change the CAPI Server TCP Port. See also: Switching On / Off the Header and Logo in the Router

11.1.5.2.2 Configure ISDN connection

IMPORTANT: The device must be connected with an active and configured connection of the phone arrangement / NTBA.

Save configuration			ICDN Confirmation MCN	O - n fi mundi - n
Assistants	-		ISDN Configuration	Configuration
System Management	•			
Physical Interfaces		Port	ISDN Switch Type	
AUX		bri-0(TE)	Dialup (Euro ISDN),Point-to-Po	pint 🖉
Ethernet Ports		bri-1(TE)	None,Point-to-Point	
ISDN Ports				E .
LAN	_			

Open the Menue "Physical Interfaces" and select "ISDN-Ports". Depend on the device you can see "BRI" ans/or "PRI"-Ports.

Note:

Normally the ports on "automatic" recognition are put. If the device was restarted after the connection of the ISDN management and the connection was recognised, this is already indicated you under "ISDN Switch type".

In this case you can ignore the next step. If the connection was not recognised (e.g. because as a protocol Q-SIG" is furnished), you must configure the connection manualy.

ISDN Configuration MSN Configuration

Basic Parameters	
Port Name	bri-0(TE)
Autoconfiguration on Bootup	Enabled
Port Usage	Not used
ISDN Configuration Type	O Point-to-Multipoint Point-to-Point
	Advanced Settings
	OK Cancel

Unmark the option "Autoconfiguration on Bootup"

As "Port-Usage" select:

Dialup (Euro-ISDN)	If the connection with PBX is a Point-to-Multipoint or Point-to-Point with DSS1 or you use an NTBA/Primärmultiplexer (S2M)
Q-SIG	If the connection with PBX use the Protokoll Q-SIG.

In "ISDN-Configuration Type" select:

Point-to-Multipoint	Called Party Number in accordance with ETSI ETS 300 102-1: 4.5.8 complete in Setup Message 3.1.16 or in accordance with ITU Q.931: 4.5.8 complete in Setup Message 3.3.9
Point-to-Point	PP means that Overlap Receiving is enabled in accordance with ETSI ETS 300 102-1: 2.1.1.16 as well as 2.1.2.17 or in accordance with ITU Q.931: 5.1.3 - CalledPartyNumber in accordance with ETSI ETS 300 102-1: 3.1.16 or in accordance with ITU Q.931: 4.58

Note:

If you select "Point-to-Point, a new line " P-P Base Number" is indicated. Please don't type in anything !

Click on OK to store the settings

Change to **MSN Configuration** – also if the connection recognised be reboot.

	ISDN Configuration	MSN Configuration	\bigvee	
ISDN Port	Service	MSN	MSN Recognition	
	C	New		

Normally there is no entry. Click on "New" to provide an entry. The following configuration are independent of the connection. You need to configure always.

Basic Parameters	
ISDN Port	
Service	ISDN Login
MSN	999999
MSN Recognition	● Right to Left ○ Left to Right (DDI)
Bearer Service	Data + Voice Data Voice
	OK Cancel

ISDN-Port	Select the used ISDN Port	The adjustment in " MSN-Recognition " depents of the connection type.		
Dienst	ISDN-Login	Right to Left	If you use a Point-to-Mutlipoint connection	
MSN	999999	Left to Right (DDI)	If you use a Point-to-Point connection	

Bearer Service set to " Data + Voice

Save the configuration with "OK"

At the end select "save Configuration" on the left side about the menu .

Recommendation – but not compelling necessarily: Now they should restart the device!

After that check the Status of the Connection

ve configuration			
sistants 🗸 🗸			
stem Management 🔹 🔺	Automatic Refresh Interval	60 Seconds Apply	
Status	Warning: System Pa	ssword not changed!	
Global Settings	System Information	5	
nterface Mode / Bridge	Uptime	92Day(s)0Hour(s)23Minute(s)	
roups	System Date	Tuesday 2016 Aug 30 .09:25:14	
dministrative Access	Cariel Number	DNADCM014240222	
Remote Authentication	Serial Number	RN4BCM014Z40ZZZ	
Configuration Access	BOSS Version	V.9.1 Rev. 10 (Patch 3) IPSec from 2014	/10/17 00:00:00
ertificates	Last configuration stored	Monday, 2016 May 30, 09:44:21	
vsical Interfaces -	Modules		
······································	DSP Module	M 8 DSP V2 (0/8)	
N -	Physical Interfaces		
ewall 👻	Interface	Connection Information	Link
IP 👻	en1-0	10.10.13 / 255.255.255.0	0
cal Services 🗸	en1-4	Not configured / Not configured	. 0
•	bri-0	Configured	$>$ \circ
intenance 🔹	bri-1	Not configured	0
ternal Reporting 🛛 👻	WAN Interfaces		
nitoring -	Description	Connection Information	Link

11.1.5.3 Advanced Configuration- Headline and Logo

By default, a so-called fax header should be printed on every fax to be sent. The fax header should contain data / time as well as the sender as text and the fax sender ID:

BIANCA/FAX +49 8142 4799385	Mustermann GmbH & Co. KG	13.01.2010 13:05	P.001(001)

The fax header consists of information from the ISDN-board / VoIPconnect module / Funkwerk Router and ixi-UMS software. Name and sender number are passed on to the CAPI-interface (e.g. ISDN-board) by the ixi-UMS Kernel. Date and time are inserted by it.

When deploying a Funkwerk ISDN-Router you can determine, whether and which of the information shall appear in the header generally.

Please proceed as in the following:

- 1. Open the web-interface of the Funkwerk Router and log on.
- 2. Change the view from Standard to SNMP-Browser
- 3. Open the tab capi in the menu bar on the left side
- 4. Open the sub item capiConfigTable in the tab capi

and it is the state	1 10			2 - Maria		10		- 31	1	13651
bintec RT1202	Lang	uage Eng	lish 🔽 🚺	View SN	MP Browser	Onlin	e Help I	_ogout	tekker Grosp Con	leg
					A				and a second second second	-
Save configuration					$\boldsymbol{\Lambda}$	capiCon	figTable			
administration 🔹					1		-			
•••					U					
capi 🔺										
сарі	View	20 per	r page 🖾 🖄 Filte	r in None	\sim	equal 🗸 🗸		G	D	
capiApplTable	Index	StkNumber	FaxG3RcvSpeed	FaxG3ECM	FaxG3Header	VoiceCoding	SendAlerting	V42bis	ModemDefault	FaxModulat
capiConfigTable	0	0	maximum	on	no_logo	reverse	voice_only	off	modem_profile_1	v17
capilnfoTable	1	1	maximum	on	no logo	reverse	voice only	off	modem profile 1	v17
capiListenTable	Page	1 Items: 1	- 2		_ 3		_ /			
capiMultiControllerTable	1 ago	. 1, 10110. 1	-							
capiNcciTable							New			
capiPlciTable										
capiUserTable										
hdsl2shdsl 🗸										

capiConfigStkNumber (*)	0
capiConfigFaxG3RcvSpeed	maximum 🔽
capiConfigFaxG3ECM	
capiConfigFaxG3Header	no_logo
capiConfigVoiceCoding	not_available
capiConfigSendAlerting	voice_only 🗸
capiConfigV42bis	off 🗸
capiConfigModemDefault	modem_profile_1
capiConfigFaxModulation	v17 🔽
capiConfigFax12000	off
capiConfigFaxTXLevel	db6 🔽

- 5. Select 🖄 Symbol to open the used controller.
- 6. Select the capiConfigFaxG3Header :

Zur Auswahl stehen: Logo_Header No_Logo No_header Not_available

BIANCA/FAX +49 8142 4799385	Mustermann GmbH & Co. KG	13.01.2010 13:05 P.001(001)
-----------------------------	--------------------------	-----------------------------

No_Logo (Empfohlen)

The bintec elmeg / Bianca is switched off. The header consisting of date / time from the router and the sender information from the ixi-UMS Kernel are displayed.

13.01.2010 13:01 P.001(001)

Note:

1000

If no sender information are deposited at the ixi-UMS Kernel or delivered by the sender, only date and time are displayed in the header:

No_header

Neither date / time, nor any other information are printed with the sending.

	www. ระเงงเช่อเจ onic.co
--	---------------------------------

7. Confirm the configuration with OK.

8. Save the configuration so that it is available when the router has to be restarted.

11.1.6 Set-up bintec elmeg be.ip plus

To send and receive Fax/Voice/SMS a "CAPI" must be installed on the ixi-UMS-Server. The CAPI must support "Fax G3". This function are available in all bintec emleg products if a DSP-Module is built-in.

This chapter describes the configuration of the "be.IP plus" product from "bintec elmeg" in the "PBX" mode. The bintec elmeg be.IP Plus provides 2 channels. Fax is supported on one channel and voice on 2 channels.

The "Remote-CAPI for MS-WINDOWS" (at least version 1.1.7 from 07.2015) from "bintec elmeg" must be installed on the ixi-UMS Business server.

ixi-UMS Business can be installed bevor or after the LANCAPI.

11.1.6.1 Requirement

On the device must installed the firmwae 10.1.7.103 or newer and must set in "PBX-Mode".

1. A "bintec elmeg be.IP plus" with integrated DSP

Open the Configuration and navigate to "System Management – Status". In section "Moduls" you can see the installed DSP modules. If this information not present you can't use this device with ixi-UMS

∎				Logout
be.IP plus	Eldat Group Company	LANGUAGE	VIEW Standard 🗸	SAVE CONFIG
System Information			Resource Informatic	'n
Uptime	0 Day(s) 0 Hour(s	i) 50 Minute(s)	CPU Usage	0%
Night Mode Status	1 danadari 2016 li	Hot 00.0007 Off	Alamanistanannais	46 5 4 9 7 9
Modules			VolP Trunk Lines	
DSP Module SoftCoder (0/4)	LANTIQ (0/5)		No. Description	Registrar A
Physical Interfaces			WAN Interfaces	

2. Outside Line

The PBX must be connected to a SIP Provider. The conencttion properties must be known! (See ixi-UMS_TK-Konfigblatt.pdf)
3. User/Phone-Configuration

A user must be put on for every phone number/DDI and for every Fax-Voice-number/DDI.

be.IP plus	i tec elmeg at Group Company			LAN	IGUAGEW	/ Standarc
USERS CLASS OF SERVICES	PARALLEL RING	ilNG				
Users						
Name_	Description	Active Class Of Service	Intern	al Numbers		
Benutzer 3 a/b3 Tel	a/b3 Tel 12	Uneingeschränkt		12	i ,	. =
Benutzer 4 a/b4 Multifunktion	a/b4 Fax 13	Uneingeschränkt		13	1	
Benutzer 5 Sys Tel	Sys Tel 20	Uneingeschränkt		20	i ,	
Benutzer 7 DECT	IP DECT 22	Uneingeschränkt		22	i ,	·
Benutzer 8 ISDN1	ISDN1 30	Uneingeschränkt	8,	30, 84	Î,	<i>`</i>
Fax/Voice Nummer Kathi Huber		Uneingeschränkt		180	Î,	
Fax/Voice Nummer Klaus Mueller		Uneingeschränkt		181	1	
RBR		Uneingeschränkt		85	i ,	•

The desired Fax/Voice numbers must be assigned to the interface "CAPI". -> Moreover you find explanations under <u>Configuration be.IP plus</u>.

11.1.6.2 Configuration be.IP plus

The following settings should be carried out compelling and/or the settings be checked. All in the following described settings can be carried out above the web Konfigurations surface in the view "standard".



11.1.6.2.1 Setup CAPI-Server

Normally the user "default" is put on for the access to the CAPI. The user has no password You should put on a user with password to use the CAPI.

Open the menue in the Web configuration and navigate to "Local Services". Open the menue "CAPI Server", select the Tab "USER". and add a new User object.

LAN					
Wireless LAN Controller		be.IP plus	bintec elmeg	LANGUAGE	VIEW Standard
Networking					
Local Services		USER OPTIONS			
		Pagic Darameters			
ognorio cierie		Basic Parameters			
DHCP Server		User Name IXI-UMS			
DHCPv6 Server	-				
CAPI Server		Password		♥	
Scheduling		Access		Enable	d
Surveillance	_				
UPnP				OK	CANCEL
HotSpot Gateway				UK	CANCLE

This user data must be defined in the bintec elmeg LANCAPI on the ixi-UMS server later.

Note:

The server CAPI must be Enabled

Change to Tab **Options.** Here you must enable the server and the Faxheader. Please don't change the CAPI Server TCP Port.

							Logout ?
be. _{be.ip}	IP plus	(bintec elmeg	LANGUAGE	VIEW Standard	•	SAVE CONFIGURATION
USER	OPTIONS						
Basic	Parameters	5					
Enable	e server						Enabled
Faxhe	ader						Enabled
CAPI S	erver TCP Port	2662	2				

11.1.6.2.2 Assign phone number

At the next step you must assign the Fax/Voice-Phone numbers of the Capi . Open the menu "Terminals" – "Other phones". Choose here the Tab "CAPI".

Physical Interfaces VolP	be.IP plus fieldar Group Company LANGUAGE VIEW Standard
Numbering	VOIP ISDN ANALOG CAPI
Terminals elmeg System Phones	CAPI
Other phones	Description Internal Numbers License Allocation
Overview	capi 🖉 🛑 📋 🗾
Applications	APPLY NEW

Klick to edit the entry. Now choose"ADD" to define the phone numbers which of the CAPI interface should be assigned.

Basic S	ettings		
Descript capi	ion		
Basic P	hone Settings		
Internal	Numbers		
	Internal Number		
	82 (82)	ī	
	83 (83) 🔻	Î	
	85 (85) 🗸	Î	
	ADD		
		ОК	CANC

Confirm with OK.

CAPI				
Description	Internal Numbers	License Allocation		
capi	82, 83, 85	0	Î	1

11.1.6.3 Advanced Configuration- Headline and Logo

By default, a so-called fax header should be printed on every fax to be sent. The fax header should contain data / time as well as the sender as text and the fax sender ID:

BIANCA/FAX +49 8142 4799385	Mustermann GmbH & Co. KG	13.01.2010 13:05	P.001(001)
			• • •

The fax header consists of information from the LANCAPI and ixi-UMS software. Name and sender number are passed on to the CAPI-interface (e.g. ISDN-board) by the ixi-UMS Business. Date and time are inserted by it.

When deploying a bintec elmeg pe.IP plus you can determine, whether and which of the information shall appear in the header generally.

Please proceed as in the following:

- 1. Open the web-interface of the Funkwerk Router and log on.
- 2. Change the view from Standard to SNMP-Browser
- 3. Open the tab capi in the menu bar on the left side
- 4. Open the sub item capiConfigTable in the tab capi

administration 🗸 🗸	Ausloggen 🥐	
adsl 🗸	SPRACHE Ansich SNMP-Browser - KONFIGURATION SPEICHER	RN
authentication 🗸 🗸		
bac 🗸 🗸		
bridge 🗸 🗸	capiconfigiable	
capi	SendAlerting V42bis ModemDefault FaxModulation Fax12000 FaxTXLevel	
capi	voice_only off modem_profile_1 v17 off db6 📋 🖍	
capiApplTable	III	F
capiConfigTable	NEW	
capiInfoTable	n von unseren Servern nachgeladen werden, benötigen Sie eine	

5. Scroll to the right and click

6. Adjust your wanted capiConfigFaxG3Header:

capiConfigTable		
capiConfigStkNumber (*)	0	
capiConfigFaxG3RcvSpeed	maximum 👻	You can select: Logo_Header
capiConfigFaxG3ECM	on 👻	No_Logo No_header Not_available
capiConfigFaxG3Header	no_logo 👻	not_available
capiConfigVoiceCoding	reverse 🔻	-
	voice only -	_

logo_header

The header as well as the Funkwerk / Bianca fax logo are displayed

|--|

No_Logo (Recommended)

The bintec elmeg / Bianca is switched off. The header consisting of date / time from the router and the sender information from the ixi-UMS Kernel are displayed.

13.01.2010 13:01	P.001(001)

Hinweis:

If no sender information are deposited at the ixi-UMS Kernel or delivered by the sender, only date and time are displayed in the header:

No_header

1

Neither date / time, nor any other information are printed with the sending.



7. Confirm the configuration with OK.

8. Save the configuration so that it is available when the router has to be restarted.

11.1.7 Installation and Configuration Remote-CAPI

On the ixi-UMS Business-Server must be installed .NET Framework 3.5.

The installation file of "Remote-CAPI for MS-WINDOWS" (at least version 1.1.7 from 07.2015) from "bintec elmeg" must be stored on the ixi-UMS Business server. The ixi-UMS Software can be installed bevor or after the LANCAPI.

Note:

The ixi-UMS Business Software is an 32bit-application. Therfore the installation of 32bit CAPI is required – independent of the version of the operating system. The set-up for 64 bits instal normally 32 bits CAPI. dll automatically with.

Please note: the Configuration of the LANCAPI is only in german available !

If you are installing or updating the LAN Capi after the ixi-UMS software, you must first terminate the ixi-UMS Kernel service



Remote Clients Co	onfiguration ? X
CAPI Konfigu	ration
Remote CAPI Erweitert	
IP-Adresse oder Host-Name des Gerätes:	TCP Port des Remote CAPI Servers:
IP des Routers 🗸 🗸	2662
Benutzername:	Paßwort:
default	
Werte übernehmen	Mehrere Geräte (CAPI2032.DLL)
32-bit CAPI: Sie verwenden die Version der Drücken Sie 'Mehrere Geräte (I Informationen zu erhalten.	CAPI2032.DLL für mehrere Geräte. CAPI2032.DLL)', um weitere
OK Abbrechen	Hilfe

At the end of the installation the configuration of the Remote CAPI is open.

Type in the IP-Address of the PBX

If you don't like to use the Default user, enter the CAPI user and passwort, wich you has defined in the PBX.

Select "Werte übernehmen" and after that select "Mehrere Geräte (CAPI3032.dll)"

In this window the IP address of the be.IP Plus is indicated you as "Gerät/Contoller" and under it the active controller.

Remote Multi CA	API Client Konfiguration	? X
Remote Multi CAF	PI Client Konfiguration	
Gerät / Controller ■ (10.10.10.13, Port: 2662) ≪ Controller: 1	Lokaler Contro	ierät hinzufügen Gerät entfernen Gerät Controller Test
Information Remote Multi CAPI Client ist installiert! Konfigurierte Geräte: 1 Controller gesamt: 1 Drücken Sie auf 'Test', um die Verfügbarke	eit der Controller zu überprüfen.	
OK Abbrechen		Hilfe
Remote Multi CAPI Client	t Konfiguration 💌 ller sind verfügbar.	Note: The announ Router can
_	ОК	The test do whether the

Should several PBX and/or bintec elmec Router be bound, you can add this here with "Gerät hinzufügen".

Click on the button "Test" to make sure that the Remote-CAPI a connection with the Router can be based.

The announcement means that the connection with the Router can be produced and that there a controller is furnished.

The test does **not check** the registration data and NOT whether the ISDN connection functions.

Confirm all Tabs and restart the server.

For the next steps you can login via RDP session. But note: alway login with the ixi-UMS installation account !!

11.1.8 Site Settings - Creating the Call Numbers

On the basis of the <u>site settings</u>, ixi-UMS Business generates the UMS-recipient number and the sender number with incoming messages and creates the number to be called with outgoing messages.

Both processes and the required information depend on the <u>settings at the PBX</u> as well as the signaled information about the call number (ToN).

Incomming Calls:

All phone numbers are converted into the full-canonical format (+49...).

Outgoing Call:

If the phone number begins with + (is addressed in the international format +49304567489) this is shortened on grounds of the location information max. and then the PBX Outside lin access Number is added.

If the outgoing news is addressed in the local or national format (does not begin with +), the phone number is complemented only around the PBX access Number is added..

Incomming - Reciptnumber

Becomes no ToN, or ToN = unknown signalled, the location address puts of the ixi-UMS Business Server normally to the receiver's number (Called party Number) ALWAYS at the head.

If the receiver's number is signalled as a direct dialling number follows: Server Side: +49 30 456987 direct dialling number: 123 from ixi-UMS Business provided receiver's number around:: +49 30 456987123

If the receiver's number is signalled inclusiv acces number: Server Side: +49 30 456987 direct dialling number 456987123 from ixi-UMS Business provided receiver's number around: +49 30 456987456987123

Solution possibilities :

- Configure the PBX for:
 - o direct dialling number is Recipient number
 - o correct ToN for the Called Party Number (not possible with SIP)
 - o **all** phone numbers are signalled in the E. 164 format
- delete the access numer in the server site
- define the access number as "Internal code" (Point-to-Ponit only)

Incomming - Calling number

The sender's number (caling number) can be signalled to ixi-UMS Business as an internal, local, national or international phone number. Follow the information about <u>phone number transmission and ToN - sender's number</u>.

Some phone arrangement signal, in addition, the PBX acces number. In this case the setting <u>Phone number format</u> must be change.

Signal from PBX: 00896487798 - The PBX access code is include

from ixi-UMS Business Server generate sender number: +89
Activate "remove outside line access..." in ixi-UMS Business Server
Precondition: the transmitted outsite line access corresponds in the location for outgoing talks registered outsite line access
and as a ToN it is signalled "unknown"

Signal from PBX: 896487798 - the nationale Access code ist missing from ixi-UMS Business Server generate sender number: +49 89 896487798

The problem can't fixed in the ixi-UMS Business Server The PBX must be configured:

- correct ToN for the Calling Party Number (not with SIP)
- the Calling Party Number must signals with the nationale Access code

Outbound - Recipient number

In Germany can be chosen within the city without local prefix. If addressed in the international format, the phone number shortens of the ixi-UMS Business Server on grounds of the location setting:

Example: Address: +493014987978

 Server Site : +49 89 xxxxxx the ixi-UMS Business Server shortens: 03014987978
 Server site : +49 30 xxxxxx the ixi-UMS Business Server shortens : 14987978

In some countries, the area code has to be dialed also with local calls. In this case, it must activate "<u>Dieal alway national</u> <u>access and area code</u>".

Is to be followed with this setting, how the phone numbers in int. Format addressed / are shown:

e.g. Italien:

national = local shown: 02 64489945 national = local shown: +3902644899 -> the "National AccessCode" 0 is a component of the phone number ixi-UMS Business Server Konfiguration: In the Server Site must be put down 02 as a "Area Code" and the "National Access Code" must be empty

e.g. Belgien:

national = local shown: 083 64489945

national = local shown: +3983644899 -> the "National AccessCode" 0 is **not** a component of the phone number In the Server Site must be put down 83 as a "Area Code" and in the "National Access Code" must must be put down 0

E.164-Format

If ixi-UMS Business Server is <u>configured for E.164</u>, all phone numbers are send in format 49... to the PBX and all phone numbers must signale in this format from the PBX, Please see: <u>Call Number Transfer in E.164-Format</u> In this case

- the incomming phone numbers are added with + only

- the + will be removed in the outgoing phone numbers

11.1.9 Route by Redirection

The method "Route by Redirection" allows that all the users can use the same voice mail number (voice pilot number) and nevertheless have their individual voice box. Because of this, this number can be entered in the PBX globally as "dropping number".

Moreover, all the users can call this number from their office telephone in order to access their mailbox by telephone. If available, a key for the call-back to the mailbox can be configured in the PBX globally.

Example:

As "voice mail number", the number 9999 has been determined. The PBX routes all the calls to this number to the ixi-UMS Business Kernel.

A user switches the call transfer at his telephone to the number 9999. When a call comes in at the user's phone, this call is transferred to 9999.

The ixi-UMS Business server accepts the call, but evaluates the originally dialed number, the telephone number, and searches for this telephone number in the specified LDAP database. When user is found to this number, the deposited announcement is played. The caller can leave a message, which is sent to the mail server and then to the mailbox of the user.

The user can access this voice-maiboxl e.g. by calling the number 9999 from his office telephone. He then is connected to his mailbox immediately.

Set up ixi-UMS Business

In order to set up "Route by Redirection" on the ixi-UMS Business system, the following steps have to be taken:

1) ixi-UMS Business must be enabled for the evaluation under "Voice-Mailbox" - Basic Settings - <u>Shared Voice-mailbox</u> number and the future global number must be specified.

2) The Welcome Mail must contain the valid "Voice-mailbox number" for all users.

3) The telephone number of the forwarding telephone must be entered in the LDAP database with the user in the format: +49 956 8411288 or +499568411288 in the fields:

- TelephoneNumber (telephone number) or
- OthetelephoneNumber (phone number other).

Determine the required numbers

"Route by Redirection" can only be used when the PBX forwards the actually dialed phone number as RedirectionNumber (or Diversion Number / diversion leg info with QSIG).

In addition, it must be ensured that when using "E.164" also this call number is transmitted as E.164 call number.

In the following tests, please note that the ixi-UMS kernel service must be terminated.

If the tests are completed after the base configuration is complete, you must open the Windows Services console and stop the ixi-UMS Business Server service.

1) using the bintc elmeg Remte-Capi - test with CAPI test tool

- a) Start the test tool in the directory from <u>ixi-UMS Business Web configuration</u>
- b) Set up a call forwarding on the telephone to the number of the common voice-mailbox number.
- c) Activate the "wait for call" button (if necessary change the timeout) and call from your mobile phone on the phone.

	ixi-UMS CAPI Test	Tool		x
Configure line access Controller number 1 🗸	Point-to-Point / Trunk	⊖ Multipoint	Language English V	
Enter phonen number or read phonen numb	pers			
destination phone number	3625	Type: unknown / Plan: unknow	vn	
originator phone number	0017569814	Type: unknown / Plan: ISDN/T	elephony	
redirection phone number	814	Type: unknown / Plan: unknow	vn	
Result error: 0 CAPI message 0; CAPI: bintec elmeg GmbH (RMCC)	x0000 O.k.	Action make call wait for call	timeout 30 V	

In the field "redirection phone number", you will be shown what the telephone system transmits to ixi-UMS Business. It must be either the extension number or (with using E.164) the E.164 number of the phone.

2) when using XCAPI - test with the XCAPI test tool

- a) Activate the trace in the XCAPI
- b) Start the XCAPI Test Tool from the Start menu
- c) Set up a call forwarding on the telephone to the number of the common voice mailbox number.
- d) Call from your phone on the phone. When the call is displayed in the test tool, you can hang up again.
- e) Open the trace and select the test call.
- f) On the right hand side, you will see the "redial number".

1	XCAPI T	race Anal	yzer 3.6.	2 (C:\U	sers∖Ad	mir	nistrator\D	es k top\rb	r.xct)		x
FILE	CALLS	DETAILS	MWI	REGIST	RATION	S	P OPTIONS	SYSTEM	0	WARNINGS	
c	2	Š,	~~		»		». •	~~ }			
Fii	nd F	ind Next	Save rece	ived Sa	ve sent	Pla	y received	Play sent			
	Find				Aud	lio			-	_	
Start			Dura	ion	End		Name		Value		^
<u>ب</u>	28/12/2	016 12:37:03	00:0	0:08.013	28/12/20	016	Packets ou	t of time	0		
÷- 🧱	28/12/2	016 12:44:34	00:0	0:18.803	28/12/20	016	Packetloss		0 (0.00%	6)	
l	· 🍕 🗧 28/1	2/2016 12:4	4:34 00:0	0:18.679	28/12/2	016	Averade de	elta	144 ms	,	
							Max delta		0 ms		
<		ш				>					
								ND	202		
Voice	e, Fax & C	communica	tion Messa	iges CA	PI Me 🔨	>	DATA-B3-I		393		
⊡ ·· F	E RTP (Sender)				DATA-B3-I	REQ	247				
	RTP (Recei	iver)					DATA-B3-	CONF (wr	0	_	
∎ A	Audio (Ser	nder)				=	Redirectio	on			_
± A	Audio (Re	ceiver)				~	Redirection	n Number	814		=
BT: 143	3:56:37.58	9	SM: 143:5	6:37.589		PI				1	~

It must be either the extension number or (with using E.164) the E.164 number of the phone.

11.2 Preparing Messagings System

The mail server must accept incomming ixi-UMS messages from the ixi-UMS Business server and send outgoing ixi-UMS messages to the ixi-UMS Business server.

According to construction and configuration of the available mail servers organisation there is a separate "Hub-Transport" server and/or already a suitable "ReceiveConnector".

Moreover, in the mail server a "Routing entry" must be defined for sending the ixi-UMS messages to the ixi-UMS Business server.

Configuration examples and tips for Microsoft Exchange and IBM Dominoes are shown in the following.

Exchange Server 2013/2016

Receive Connector in Exchange 2013/2016/2019 Creating a Send Connector in Exchange 2013/2016/2019

If the ixi-UMS Business should be installed on the same server as the MS Exchange Server, please not the article: Exchange Server and ixi-UMS Business on the same Server

IBM Domino Server

Preparing IBM Domino Server

If the ixi-UMS Business should be installed on the same server as the IBM Domino Server, please not the article: <u>Binding IBM</u> <u>Domino Server to IP-Address</u>

Voice-mailbox - remote Enquery:

To <u>be able to access to the mailbox</u>, change the IMAP4-settings are required in the mail to servers. With all mailsystems the mailbox access by IMAP4 can be executed by means of an "*Individual IMAP4* User Log-in".

According to mail server and used LDAP-database the users must deposit the IMAP-user name and/or the mail server password in the ixi-UMS Business Voice-mailbox configuration.

By using a Microsoft Exchange server the kind of the IMAP4 authentication must be changed in general with it ixi-UMS Business by IMAP4 can access this.

For forwarding and sending ixi-UMS messages by phone the "Relaying" must be permitted, in addition, for the ixi-UMS address types.

Information to configure IMAP 4 you can find in the article:

<u>Configure IMAP4 in Micrsoft Exchange</u> <u>Configure IMAP4 in IBM Domino</u>

11.2.1 Receive Connector in Exchange 2013/2016/2019

If the ixi-UMS Business should be installed on the same server as the MS Exchange Server, please not the article: Exchange Server and ixi-UMS Business on the same Server

Enterprise Office 365							
Exchange admin center							
recipients permissions compliance management	rules delivery reports accepted domains email ac receive connectors send connectors Select server: ADSRV2012.52012E2013.loc						
organization	+/±8…						
protection	NAME 🔺	STATUS	ROLE				
mail flow	Client Frontend ADSRV	Enabled	FrontendTransport				
mobile public folders unified messaging servers	Client Proxy ADSRV2012 Default ADSRV2012 Default Frontend ADSRV Outbound Proxy Fronten	Enabled Enabled Enabled Enabled	HubTransport HubTransport FrontendTransport FrontendTransport				

Open the Microsoft Exchange Admin Center and navigate to the mail flow - receive connectors.

Start the wizard via the **plus**-sign to set up a "new receive connector".

3	Receive	Connector	- Wi	-		х
---	---------	-----------	------	---	--	---

new receive connector	Help
This wizard will create a receive connector.	
There are five types of receive connectors. Each connector has different permissions and authentication methods. Learn more	
*Name:	
IXI-UMS Receive	
Server:	
ADSRV2012.S2012E2013.loc	
Role:	
Hub Transport	
O Frontend Transport	
Туре:	
O Custom (For example, application relay)	
 Internal (For example, intranet mail) 	
O Internet (For exmaple, internet mail)	
O Partner (For example, trusted 3rd party servers)	
next cancel	

Appoint a name and select "Custom"

As the IXI-UMS is located in the local network by default, you can select "Internal" as type.

In a more complex environment, please adjust the settings according to your organization.

Depending on which setting you have selected, various settings are queried now, which can be changed any time later on, however.

Click on "Next".

C Receive Connector - E C X	the IP-address of the ixi-UMS Business Server,
new receive connector	
A receive connector can accept mail from a range of IP addresses. Learn more *Remote network settings:	Remote Address Settings Webpage Dialog
Receive mail from servers that have these remote IP addresses. P ADDRESSES	Specify an IPv4 address, IPv6 address, IP address range, or IP address in CIDR notation. *Example: 10.5.3.2; 10.3.1.1-10.3.3.5; 3d:5e:22:51:;; 10.3.1.5/24. 192.65.15.165 ×
0.0.0-255.255.255	save cancel
back finish cancel	
Exchange Receive Connectc - X	
IXI-UMS Receive	After that, please open the Connector entry and remove all the checkmarks at "security"
Specify the security mechanism or mechanisms for incoming connections.	At "Permission Groups" "Anonymous users" must be marked
Transport Layer Security (TLS) Enable domain security (mutual Auth TLS)	
 Basic authentication Offer basic authentication only after starting TLS 	Click on "save" in order to create the Receive Connector
Integrated Windows authentication Exchance server authentication	
Externally secured (for example, with IPSec)	
Permission groups: Specify who is allowed to connect to this receive connector.	
Exchange servers	
Legacy Exchange servers Partners	
Exchange users	
Anonymous users	
save cancel	
🔍 80% 🔻 ja	

11.2.2 Creating a Send Connector in Exchange 2013/2016/2019

Please open the "Exchange admin Center" and navigate to "mail flow – send connectors.

 Enterprise Office 365 	
Exchange admin cer	ter
recipients	rules delivery reports accepted domains email address policies
permissions	receive connectors send connectors
compliance management	+ 🖉 🖮 😂 …
organization	NAME STATUS
protection	There are no items to show in this view.
mail flow	
mobile	0 selected of 0 total

In order to set up a "new send connector", please click on the **plus**-sign.

new send connector	
Create a Send connector. There are four types of send connectors. Each connector has different permissions and network settings. Learn more	
*Name:	
IXI-UMS SendConnector	
Type: Custom (For example, to send mail to other non- Exchange servers) Internal (For example, to send intranet mail)	
O Internet (For example, to send internet mail)	
 Partner (For example, to route mail to trusted third- party servers) 	
next cancel	
🔍 85% 🔻 🚽	

Please enter a name and select "Internal". Enter "next" to continue.

new send connector	
A send connector can route mail directly through DNS or redirect it to a smart host. Learn more	
*Network settings: Specify how to send mail with this connector. MX record associated with recipient domain Route mail through smart hosts + / / -	
SMART HOST	
Use the external DNS lookup settings on servers with transport roles	
back next cancel	
	.:
€ 85% ▼	.4
new send connector	
e 85% ▼ new send connector Configure smart host authentication. Learn more	**
Rew send connector Configure smart host authentication. Learn more Smart host authentication: None Basic authentication Generation Genettion Generation Generation Generation Generation Generation Gen	.1
Software and connector	.*
Rew send connector Configure smart host authentication. Learn more Smart host authentication: None Basic authentication G Offer basic authentication only after starting TLS *User name: *Password: Note: all smart hosts must accept the same username and password. C Exchange Server authentication Externally secured (for example, with IPsec) back next cancel	.*

Select "Route mail through smart hosts" in the next window and add the IP-address of the IXI-UMS Exchange Connector.

add smart host
Specify the fully qualified domain name (FQDN) or IPv4 address. *Example: myhost.contoso.com or 192.168.3.2 IP-Adress from IXI-UMS Server
save cancel

An authentication for the sending of e-mails (ixi-UMS messages) to the ixi-UMS Business Server is not required.

In the next window, you have to enter the required custom domains.

new send connector						
A Send con domains. Th a custom ty	A Send connector routes mail to a specified list of domains. These domains can be an SMTP address space or a custom type. Learn more					
*Address sp Specify the s connector w	*Address space: Specify the address space or spaces to which this connector will route mail.					
TYPE 🔺	DOMAIN	COST				
Fax	ż	1				
SMTP	ixisms.com	1				
SMTP	ixifax.com	1				
SMTP	ixivoc.com	1				
Scoped send connector						
back	next	cancel				
		🔍 85% 🔻 🔡				

You have to enter all the wanted <u>domains for the addressing</u>. However, they can be added subsequently as well. This can also be changed later on.

add domain
*Type: SMTP
*Full Qualified Domain Name (FQDN): [xifax.com X
*Cost:
save cancel

The domain with Type "Fax" has to be entered only then that messages can be sent as fax out of the Outlook-Contacts via the "To"-field.

To finish the wizard select the correct exchange server in the next window and save the settings.

11.2.3 Configure IMAP4 in Micrsoft Exchange

To <u>be able to access to the mailbox</u>, change the <u>IMAP4-settings are required</u> in the mail to servers. With all mailsystems the mailbox access by IMAP4 can be executed by means of an "*Individual IMAP4* User Log-in".

Depending on the mail server and the user administration used, the users must store their IMAP user name and/or mail server password in the ixi-UMS Business Portal in the ixi-UMS Voice-Mailbox configuration.

By using a Microsoft Exchange server the kind of the <u>IMAP4 authentication must be changed</u> in general with it ixi-UMS Business via IMAP4 can access this.

For forwarding and sending ixi-UMS messages by phone the "<u>Relaying</u>" must be permitted, in addition, for the ixi-UMS address types.

11.2.3.1 Configure IMAP4 Access

In an Microsoft Exchange organization, the Client Access Server takes care of the authentication of the users. In larger organizations, the settings relevant for IMAP4 thus have to be made at the CAS Servers. The IMAP4 service has to be started at the CAS Servers.

The transmission of the password for the IMAP4 login is performed in plaintext. The IMAP4 protocol settings have to be changed at the servers accordingly.

Open the Exchange Management Shell on your Exchange Server and enter the following command: **Set-ImapSettings -LoginType PlainTextLogin**

Machine: ex2007at3 | Scope: ex2007.de

If the powershell had not been started on the CAS Server, the CAS Server has to be stated in addition: **Set-ImapSettings -Server "CAS-Server-Name" -LoginType PlainTextLogin**

Alternatively, this setting can also be executed in the Exchange System Manager.

• Exchange admin center 2013/2016

11.2.3.1.1 Exchange admin center 2013/2016/2019

The setting for IMAP authentication can be made in the Exchange Management Console. Navigate to "Server", select the server and click on "edit".

save

cancel

Enterprise Of	fice 365					Administrator 🔻
Exchange a	idmin cen	ter				
recipients		servers databas	es da	tabase availability gro	ups virtual di	rectories certificate
permissions		2 × 2 8				
compliance mana	agement	NAME	SERVER	ROLES 🔺	VERSION	
organization		ADSRV2012	Mailbo	x, Client Access	Version 15.0	ADSRV2012
servers			-	related of 1 total		
ADSRV2012				Diseas areas the set	opartias of "IN	
/ BOILTEOIL	Message MIME 1	ormat:		Please open the pro		IAP4" at "logon met
general	Text	ormat:	~	and choose "Basic	authentication	וAP4" at "logon met ו (Plain text)"
general databases and database availability groups	Text Logon method: Basic authentica Banner string:	ormat: tion (Plain text)	>	and choose "Basic	authenticatior	וAP4" at "logon met ו (Plain text)"
general databases and database availability groups POP3	Text Logon method: Basic authentica Banner string: The Microsoft Ex	tion (Plain text) change IMAP4 service is ready.	> >	After having chang	ed the settings	וAP4" at "logon met ו (Plain text)" ו, the IMAP4 service h
general databases and database availability groups POP3 IMAP4 DN5 language	Text Logon method: Basic authentica Banner string: The Microsoft Ex	ormat: tion (Plain text) change IMAP4 service is ready.	> >	After having chang be restarted.	ed the settings	IAP4" at "logon met n (Plain text)" n, the IMAP4 service h
general databases and database availability groups POP3 IMAP4 DNS lookups transport limits	Text Logon method: Basic authentica Banner string: The Microsoft Ex	tion (Plain text) change IMAP4 service is ready.	>	After having chang be restarted.	ed the settings	IAP4" at "logon met n (Plain text)" n, the IMAP4 service h
general databases and database availability groups POP3 IMAP4 DNS lookups transport limits transport logs	Text Logon method: Basic authentica Banner string: The Microsoft Ex TLS or unencrypt	ormat: tion (Plain text) change IMAP4 service is ready. ed connections:	>	After having chang be restarted.	ed the settings	IAP4" at "logon met n (Plain text)" n, the IMAP4 service h

11.2.3.2 Relay Enabling in Exchange 2013/2016/2019

When the version "ixi-UMS Business Mobile" is installed and the user can access his UMS-messages by telephone, he may have to option to answer or forward the messages. This procedure is a "relaying" for the MS Exchange Server. The domain enabled for the relaying must be enabled explicitly.

Open the Exchange admin center. Select the tab "Accepted Domains" at "mail flow".

 Enterprise Office 365 					
Exchange admin center					
recipients	rules delivery	reports accepted	domains email a ors		
permissions	+ / ± ₽	Ø	013		
compliance management	NAME	ACCEPTED DOMAIN	DOMAIN TYPE		
organization	S2012E2013.loc (S2012E2013.loc	Authoritative		
protection					
mail flow					
mobile					

🥖 🛛 Accepted Domain - Wind 🗖 🗖 🔼 🗙

new accepted domain

Accepted domains are used to define which domains will be accepted for inbound email routing.

*Name:

IXI-UMS Enhanced Voice Package Forwarding

*Accepted domain:

ixivoc.com

This accepted domain is:

- Authoritative domain. Email is delivered to a recipient in this Exchange organization.
- Internal relay domain. Email is delivered to recipients in this Exchange organization or relayed to an email server outside this organization.
- External Relay Domain. Email is relayed to an email server outside this Exchange organization.



Create a "New Accepted Domain" via the +-Button". The "Name" can be freely selected.

As "Accepted Domain", have you to enter exactly the sames as determined in the ixi-UMS Business Configuration at "<u>Mailserver Settings - Addressing</u>".

You have to determine that this is an "External Relay Domain" and confirm with "New".

These entries must be made for all types of messages, that can be forwarded by telephone.

11.2.4 Preparing IBM Domino Server

The SMTP-Listener-Task is used for receiving SMTP e-mails. If you have a default installation, the SMTP-Listener-Task is enabled, since IBM Domino 7.

However, the enabling of the SMTP-Listener-Task must be executed in the context with the installation of the ixi-UMS Business, anyway.

ixi-UMS messages that shall get from the IBM Domino Server to the ixi-UMS Business Server are normally "routed" by a <u>Foreign SMTP Domain</u>

In IBM Domino, further routing configurations are absolutely possible or even necessary in more complex environments.

In order to allow mobile access to users' mailboxes, you have to configure the IMAP4 protocol also.

Note:

1. The IMAP protocol is an Internet protocol for IBM Lotus Domino Server. Therefore, Internet passwords are used, if needed.

If have not used Internet passwords so far, **you have to set them up now**. This password must be informed of the users with it he can deposit it for the access to the Voice-May box. Alternative they must deposit it directly in the ixi-UMS user management.

Follow moreover also the article:

http://www.ibm.com/support/knowledgecenter/en/SSKTWP_9.0.0/com.ibm.notes900.help.doc/sec_pass_syncweb_t.html

2. In order to use ixi-UMS Business IMAP queries, you have to <u>create a fulltext</u> index for mobile enabled mailboxes. Please consider: A fulltext index exhausts hard disk free space on your IBM Lotus Domino Server.

In this manual, the easiest way - from estos's point of view - is demonstrated.

11.2.4.1 Start, Stop, Restart Tasks

All tasks can be controlled via the "Console". Required are

for the area	the tasks
message transfer and message routing	Router and SMTP
access users' mailboxes (remote inquiry)	IMAP

These tasks can be controlled via the Console as in the following:

command	Action	Example:
load <task></task>	starts a Task	load router
tell <task> q</task>	stops a Task	tell router q (tell router quit)
restart task <task></task>	starts a Task new	restart task router

🔞 domino7de/d7de: Lotus Do	mino Server		
>			▲
15.03.2006 11:44:08 15.03.2006 11:44:08	Mail Router started for domain D7DE Router: Internet SMTP host domino7de	in domain	d7de.local
> tell router q 15.03.2006 11:44:21 15 03 2006 11:44:21	Router: Shutdown is in progress Mail Routen shutdown		
> > load router			
15.03.2006 11:44:29 15.03.2006 11:44:29 >	Mail Router started for domain D?DE Router: Internet SMTP host domino?de	in domain	d7de.local
> restart task router			
15.03.2006 11:44:37 15.03.2006 11:44:37 15 03 2006 11:44:40	Router: Shutdown is in progress Mail Router shutdown Mail Router started for domain D7DF		
15.03.2006 11:44:40	Router: Internet SMTP host domino7de	in domain	d7de.local

Note: Stopping and restarting tasks may take a while.

11.2.4.2 Task Status

The command "show task" displays all running Domino tasks. Here you can see whether the task is up and on which port.

👩 domino7de/d7de: Lotus Do	omino Server	
Database Server	Shutdown Monitor	
Database Server	Process Monitor	
LDAP Server	Listen for connect requests on TCP Port:389	
LDAP Server	Utility task	
Process Monitor	Idle	
SMTP Server	Listen for connect requests on TCP Port:25	
SMTP Server	Utility task	
POP3 Server	Listen for connect requests on TCP Port:110	
POP3 Server	Utility task	
IMAP Server	Listen for connect requests on TCP Port:143	
IMAP Server	Utility task	
Admin Process	Idle	

11.2.4.3 Enable SMTP

The SMTP-Listener-Task is used for receiving SMTP e-mails. If you have a default installation, the SMTP-Listener-Task of the Domino 7 Server is enabled. However, the enabling of the SMTP-Listener-Task must be executed in the context with the installation of the ixi-UMS Business Domino Connector, anyway.

If the SMTP listener task is not enabled so far, you will have to enable the task now. If the SMTP listener task is configured like shown below, the SMTP listner task is entered automatically in the "notes.ini" of the server. As a result, the SMTP listener task is started as well when you restart your IBM Domino Server.

🤣 D 🖁	7ENG Domain - IBM Domino Adminis	trator _ 🗌 🗙			
File	Edit View Create Actions Administ	ration Text Help			
	D7ENG Domain Up Admin/d7eng ×				
5	People & Groups Files Server Me	essaging Replication Configuration			
ß	Server: domino7eng/d7en Release 7.0 on Window	g s NT 5.0 Use Directory on: Current Server ▼ > Tools			
	 Gerver Current Server Document 	🕼 Save & Close 📀 Create Web 🔘 Examine Notes Certificate(s) 🗴 Cancel			
	III Server Documents	0100100101010			
	Configurations	ng.d7eng.local			
	Econnections Programs	MTA: Missellaneous Transactional Logging Shared Mail Administration			
	External Domain Network Inf	. MTAs Miscellaneous Transacuonal Logging Shareu Mali Auministration			
	🕨 🛐 Messaging				
	Replication	Server build number Belease 7.0			
	Directory	Bouting tasks:			
		SMTP listener task:			
	Monitoring Configuration	Server's phone number(s):			
		Select Enable or Disable SMTP listener task.			
		▲) 📢 ▲) [22 ▲) Office ▲) (🐲 ▲)			

11.2.4.4 Routing of UMS Messages to ixi-UMS Business

In the <u>ixi-UMS Business Configuration - Mailsystem</u> you have defined the domains for sending ixi-UMS messages. In order to add ixi-UMS Business domains, please proceed as in the following:

- 1. Open the IBM Domino Administrator.
- 2. Switch to the IBM Domino Server, which shall route the ixi-UMSmessages.
- 3. Go to Configuration Messages Domains

👌 D	OMINO9 Domain - Domino_9/Tr	rial - IBM Domino Administrator			• •
File	Edit View Create Actions	Administration Configuration He	lp		
12	; 7 🖓 🕁 🗞 🍫 🐻 💠 =	• 🕀 😑 🛱 🛱 🔍 🚍			
	DOMINO9 Domain - Domino_9/Tr	rial			
Ē	People & Groups Files Server	Messaging Replication Configurati	ion		
Û	Server: Domino_9/Tri Release 9.0.1 on \	i al Windows/7 6.1 Intel Pentium Use Di	rectory on: Current Server	▼ > Tools	
	▶ ☐ Server ▼ 3 Messaging	🕒 Add Domain 🖉 Edit Domain	🖲 Delete Domain	, 	
	🔝 Messaging Settin	Domain	Next Domain	Destination Server	
	Domains	▼Foreign SMTP Domain		'	
		*domino.fax		192.165.52.56	
	💼 Internet Sites 👻				
	< 📄 🔸 👘	< 🗋			Þ.
	Notes configuration settings have	e been refreshed	▲ (~	▲ 🔏 ▲ Online	• 🛄 •

- 4. Now klick "Add Domain" and add a Foreign SMTP Domain.
- 5. As "Internet Domain "you give the addressing for the fax sending. e.g. *fax.company or *company.fax)
- 6. As "Internet-Host" enter the IP-address of the ixi-UMS Business Server

🕝 Foreign SMTP Domain - IBM Domino Administrator	
File Edit View Create Actions Text Help	
DOMINO9 Domain - Domino_9/Trial	
Cancel	
Domain *domino.fax	a seres for
Basics Restrictions Routing Comments Administration	E
Messages Addressed to:	Should be Routed to:
Internet Domain: C*domino.fax_	Domain name:
	or, Internet host: 『192.18.57.23』
	-) 🛶 -) (666 -) (UTMIRE 🔤 -)

- 7. Proceed the same way with the domains for the services
- Voice (e.g. voc.company or voice.company)
- SMS (e.g. sms.company)
- ALERT (e.g. alert.company).

Remark: The taking over of the routing may take some time. In order to accelerate the process, it may be helpful to restart the Router Task and SMTP Task.

- 8. "Restart" the IBM Domino Router Task.
- 9. "Restart" the IBM Domino SMTP Task.

11.2.4.5 IMAP

In order to allow mobile access to users' mailboxes, you have to configure IMAP4 as the following.

11.2.4.5.1 Enable Mailbox for IMAP Access

For full functionality of the solution, the IBM Lotus Domino person document must be configured like shown below.

- Mail system to POP or IMAP
- an Internet password must be assigned
- an Internet address must be assigned

-	D7ENG Domain	Tester/d7eng 🗙		
5	BSave & Close Ex	amine Internet Certificate(s) (CExamir	ne Notes Certificate(s) 🗴	Cancel 🕖 Open Mail File 🏅
	Person: Stefan	Fester/d7eng StefanTeste	r@d7eng.local	<u>}</u>
	Basics Work/Home Of	her Miscellaneous Certificates Roa	ming Administration	
	Basics		Mail	
	First name:	^r Stefan _	Mail system:	[©] POP or IMAP , ▼
	Middle name:	Г 	Domain:	[┏] d7eng_
	Last name:	^C Tester⊿	Mail server:	🖥 domino7eng/d7eng 🛛 💌
	User name:	[©] Stefan Tester/d7eng	Mail file:	^r mail\stester_
	Short name/UserID and/or Internet address	Stetan Tester』 『STester』	Eorwarding address: Format preference for incoming mail:	″ ″Keep in senders' format 』▼
	for R4.x SMTP MTA:		When receiving unencrypted mail, PNo J	
	Personal title:	۲ ₋ -		^r No
	Generational qualifier:		your mailfile:	
	Internet password:	Enter Password	·	
			Collaboration	
		D6C80)	Instant messaging	r
	Preferred language:	Г	server:	

With

• load convert -e <mailbox directory>\<mailboxname>.nsf

the mailboxes are converted and enabled for IMAP. You can find more information about this topic in the IBM Lotus Domino Administrator manual.

🔞 domino7de/d7de: Lotus Do	mino Server	
>		
> load convert -e mai	1*.nsf	
15.03.2006 12:44:43	Mail Conversion Utility starting	
15.03.2006 12:44:46	Mail Convert: Started enabling NSF support for IMAP i	n 'ma
il\stester.nsf'		
15.03.2006 12:44:46	Mail Convert: Finished enabling NSF support for IMAP	in 'm
ail\stester.nsf'		
15.03.2006 12:44:47	Mail Conversion Utility shutdown	
N	-	

• load convert -e mail\stester.nsf

Mailbox with name "stester.nsf" is converted

• load convert -e mail*.nsf

All mailboxes in directory mail are converted

Note: If you do not use Microsoft Window OS, you have to substitue "\" by "/". (Example: "load convert -e mail/*.nsf" on Unix)

11.2.4.5.2 Mailbox Full Text Index

A full text index must be created for every mobile enabled mailbox in order to receive correct results on IMAP queries.

The full text index should be updated every time a new messages is delivered to the mailbox. For this reason, "index update frequency" should be set to "immediate".

<u> </u>	· · · · · · · · · · · · · · · · · · ·		Full Text I	ndex	2 X -
	D7ENG Domain			Use this tool to manage the full text indexes of databases.	ОК
5	People & Groups Files Server Me	essaging Replication Conf			Cancel
	Server: domino7eng/d7en Release 7.0 on Windows	g s NT 5.0 Database	Selected:	3 Databases, 49 MB bytes	
	✓-0 ✓ C:\Lotus\Domino\data	Title 🗘	Please se	elect the full text index options	-
	dfc	Admin	Create	C Update C Delete	
	🕨 🧰 domino	💊 Günther Peculiar			
	🗀 gtrhome	🧔 master account	🔲 Index -	attached files With found text 💌	-
	🗀 help	😡 Stefan Tester	🔲 Index	encrypted fields	
	iNotes	1	🔲 Index :	sentence and paragraph breaks	
			🔲 Enable	e case sensitive searches	
			Indou und		
	meval		muex upo		

Pleas note that not all Domino versions - especially older versions - work as expected, even though all settings are configured correct. As a matter of this, not all actually present messages are sent by ixi-UMS Business. In this case, the full text index must be updated like shown below.

More information about "updall" and its parameters can be found in the IBM Lotus Domino Administrator help.

⊗n	ew Program - IBM Domin	o Administrator			_ D ×
File	Edit View Create Actio	ns Text Help			
	D7ENG Domain	v Program 🗙			
M	🕒 Save & Close 🗴	Cancel			
	Program				
$\overline{\mathbb{Q}}$	Basics Administration]			
	Basics		Schedule		
	Program name:	^C updall _	Enabled/disabled:	『Enabled』 🔹	
	Command line:	[□] - F -H	Run at times:	ି _ each day	
	Server to run on:	🖥 domino7eng/d7eng 🛛 💌	Repeat interval of:	[┏] 10 ⊒ minutes	
	Comments:	Г 	Days of week:	[©] Sun, Mon, Tue, Wed, Thu, Sat ₃ ▼	Fri,

11.2.4.5.3 Check IMAP Qccess with MS Outlook Express

The easiest way to check if it is possible to login in the mailbox via IMAP4 is with an mail client like Microsoft Outlook Express or "Win Mail"

The screenshot below shows the successful and correct integration of "Stefan Tester's" mailbox into "master account's" mailbox.

 Trash Entwürfe Gesendete Obje Ver Name Server Settings Server Settings Server Type: IMAP Mail Server 		ess Book Tag - TQuick Filter P Events Filter these mr P 9 Fri Dec 21	Inbox Inbox Get Messages ▼ Write ▼ ■ Chat ▲ Addr User Name Nhox
Composition & Addres Server Name: Mailserver Port: 143 Junk Settings User Name: Benutzer@domain.de Synchronization & Stor Return Receipts Security Local Folders Junk Settings Server Settings Security Local Folders Junk Settings Server Settings Connection method: Password, transmitted insecur Server Settings Server Settings	43 Default: 143	Server Settings Server Type: IMAP Mail Server Server Name: Mailserver Port: 143 ★ User Name: Benutzer@domain.de Security Settings Connection security: Authentication method: Password, transmitted insecurely Server Settings Image: Check for new messages at startup	 Trash Entwürfe Gesendete Objel Local Folders Copies & Folders Composition & Addres Junk Settings Synchronization & Stor Return Receipts Security Local Folders Junk Settings Security Local Folders Junk Settings

If the result you get does not look like the one above, please refer to "Force configuration changes".

11.2.5 Exchange Server and ixi-UMS Business on the same Server

This setting is only required if the ixi-UMS Business is installed on the same server as the MS Exchange Server!

Recommended for Microsoft Exchange 2007 and higher:

- 1. Change the port for the reception of messages in the ixi-UMS Business, e.g. 2588. Check the port with Telnet beforehand, in order to make sure that it is not used by another service.
- 2. After having set up the send connector via the "Exchange admin center", the port must be changed via the "Exchange admin shell". The send connector must send to the IP-address and the port, which had been entered in the IXI-UMS Exchange Connector at "General".

Start the shell and enter:Changing the port: Set-Sendconnector "Name-of-the-sendconnector" -Port 2588Displaying the port: Get-Sendconnector "Name-of-the-sendconnector" | fl Port*

Alternatively in addition you can assign to the computer 2 firm IP addresses and assign to the Exchange server one of the IP address.

Open the Microsoft Exchange Management Console and navigate to the Server Configuration - Hub Transport Edit the **Default Receive Connector** properties



Switch over from "(*All available IPv4 addresses*)" to "Specify an IP address" and type in the IP address of the MS Exchange Server. Save and close all masks. The change will be activate after few secunds

11.2.6 Binding IBM Domino Server to IP-Address

This setting is only necessary when the ixi-UMS Business is installed on the same server als the IBM Domino Server is installed or will be installed!

You must have **at least two IP-addresses** configured at the machine in order to be able to execute the following steps successfully! (In this example, the IBM Domino Server is bound to the IP-address 194.11.242.40.)

- 1. Open the IBM Domino Server NOTES.INI.
- 2. Insert the parameter

TCPIP_TCPIPAddress=0,194.11.242.40:1352

3. Start the IBM Domino Server with "Restart Server".

11.3 Testing XCAPI and Tracing

The XCAPI has its own functions for testing, tracing and analyzing problems with the connection to the telephone system / gateway and establishing the connection characteristics.

First, make sure that:

- The VMWare is configured according to the specifications
- The PBX / Gateway is set up according to the recommendations

You can open the "XCAPI Configuration" and the "XCAPI Test Tool" in the ixi-UMS Business Configuration under <u>Hardware</u> or from the Start menu.

11.3.1 XCAPI Test Tool

The "XCAPI Test Tool" can be used to test incoming and outgoing voice calls and faxes as well as setting MWI. **Before you start the "XCAPI Test Tool", please stop the ixi-UMS Business Service !!**

Start the XCAPI Test Tool in the ixi-UMS Business Configuration under <u>Hardware</u> or from the Start menu.. The test tool shows you all channels / lines for **one** controller.





In the left part you see a tab "COMMUNICATION" for each channel/line. All actions of this line are displayed on the tab.

Here you can find out how the numbers are transferred from the telephone system to ixi-UMS Business in order to remove a leading 0 by ixi-UMS Business <u>Basic Configuration - Call Number Format</u>

In the right part - depending on the current status of the line - calls can be accepted or started.

Via the menu - Extras - Options - you can set which controller (configured in the XCAPI) should be used.

🕅 XCAPI Tes	t Options					\times	
GENERAL	FAX	AUDIO	REFRESH	SPECIAL			
Controller Select the XCAPI controller to be used Controller 2 - 'Alcatel-Lucent OmniPCX Office (OXO)' - 6 Channels							
Controll	er 1 - 'inn ler 2 - 'Alca	ovaphone (F atel-Lucent (PBX object)' OmniPCX Of	- 2 Channels fice (OXO)' - 6	Channels		
Enter th	e local ph	one numbe	r E	inter the local i	name		
Allow presentation of local phone number							
Incoming Call							
Auto answer Use all controller							
Answer using fax mode							
				<u>о</u> к	<u>C</u> ancel		

On the "General" tab, you can also enter a sender number and specify how the test tool should behave when an incoming call is signaled.

If ixi-UMS server is already in productive operation, we recommend not to activate the "**Auto answere**"!

You should enable the "Play build-in announcment.." function on the "AUDIO"" tab.

🕅 XCAPI Test	Options				\times
GENERAL	FAX	AUDIO	REFRESH	SPECIAL	
Announcer	build-in a	announcem	ent after conn	ect	

Only if this announcement is to be heard on the telephone is ensured that the RDP packets are transmitted.

11.3.2 Trace and Analyze

If problems arise while using the XCAPI, you can create a trace file. A trace file is a type of protocol that logs all events occurring within the XCAPI. It is highly recommended that you enable the creation of a trace file if problems arise that report a reproducible error.

Now execute this action which led to the error. When the error occured you can disable the trace. Now you can see from the trace-file which event respectively which adjustment led to the error.

The evaluation occurs about a provided analysis tool. Some problems can be determined with it independently and be repaired.

Should you be able to ascertain no problem or need help with the Lösungsfindung, turn please to the ixi-UMS Support.

11.3.2.1 Activate trace

Start the "XCAPI Configuration" via the windows startmenue and activta the "Advanced" viewing.(1) Click "Trace" in the right menu. (2)

I	T XCAPI Configuration				
File View Help					
Configuration Configuration CAPI 2.0 Options CAPI 2.0 Options Fax Controller Audioports H.323 Tweaks SIP Tweaks	Options Conditions Trace Actions Press the apply button be configurating come into 4 Apply Au Trace Configuration Select the output device neccessary to provide a f 3 ✓ Enable Trace	elow to store the trace configuration and to have the changed trace effect immediately. nalyze Now for trace messages. If the trace should be written into a file, it is ilename for this file.			
	Trace File	C:\xcapi.xct 🖉			
	XSSA Trace File	<not available=""></not>			
	Multiple Trace Files				
If XCAPI is configured to write multiple trace files, a running number will be appended to the file name. When the size of the current trace file reaches the configured maximum size, XCAPI switches to the next trace file automatically.					
Write Multiple Trace Files					
	Maximum Size (MB)	0			
Maximum Number 0					
XCAPI: 3.6.34.0 (¤70), CAPI2032.DLL: 3.6.34.0 (TE-SYSTEMS GmbH), CAPI2064.DLL: 3.6.34.0 (TE-SYSTEMS GmbH)					

Activate the option "Enable Trace" (3), select a directory with write access for the current user account, **and click Apply**.(4) The log data is saved as an .xct file. Enter the path under Trace File or click the browser button and go to the directory where you want to save the file. The file can then be viewed using the Analyze Now option, which will open XTraceAnalyzer.

Note: XCAPI will create a backup of the latest trace file before overwriting it, so you don't have to worry about using different file names.

For systems that operate under heavy load, there is an option to "write multiple trace files". A high number of concurrent calls will generate a lot of trace data, and you should try to keep the file size below 1 GB. This can be accomplished using the "Maximum Size (MB)" option.

For the mistake search in connection with ixi-UMS Business you should always provide 2 separate trace-files. The (faulty) process start with:

- the XCAPI Test Tool
- with ixi-UMS Business

How to create a trace file:

- 1. Stopp ixi-UMS Kernel and close the XCAPI Test Tool
- 2. Open the configuration dialog of the XCAPI and enable Trace
- 3. Start ixi-UMS Kernel or the XCAPI Test Tool and repeat the procedures that lead to the problem
- 4. Finish the application as soon as the error has occurred.
- 5. Disable the trace function.

11.3.2.2 Trace analysis

After creating the trces, the "Analyze" button is active. The evaluation of the SIP / H.323 communication or the

ø	XCAPI Configuration	CAPI messages should be carried out by every
File View Help		
• •		
Configuration	Options Conditions	To open the trace, click on "Analyze" or open the
Information	Trace Actions	trace by double-clicking on the created file.
	Press the apply button below to store the trac	In this case, you must first link the file "with the
CAPI 2.0 Options	configuration come into effect immediately.	directory of the XCAPI
·····································		
Controller	Apply Analyze Now	
innovaphone (Apart from the extensive menu, the view is divided
🖶 🍕 Audioports	I race Configuration	into 3 areas:

Top left:

List of recorded calls / events. Select the desired call to display the detailed information in the further windows. **Bottom left:**

Depending on the selection of the tab, the SIP / H.323 packages or the CAPI messages can be seen. Open the individual entries to get more information about each section.

The evaluation on TAB1 is only relevant for SIP

Right:

Some important parameters for the SIP / H.323 communication resp. Detailed presentation of the CAPI news

T	XCAPI Trace Analyzer	3.6.2 (C:\Users\Admii	nistrator\Desktop	\xcapi_t38_serv.xct	
FILE CALLS DETAILS	MWI REGISTRATION	SIP OPTIONS SYSTE	M 🕕 WARNIN	IGS	
Q S Find Find Next	Save received Save sent	Play received Play sent	: Open	Save	CAPI
Start 🔺	Duration End	Direction	Caller Ca	Name	Value 🔨
	6 00:00:00.492 27/06/ 18:17 00:00:00.020 27/06/ 5 00:00:04.865 27/06/ 18:40 00:00:00.016 27/06/ calls	2012 14:48:17 Incoming 2012 14:48:17 Incoming 2012 14:48:40 Incoming 2012 14:48:40 Incoming	007329396317 2° 007329396317 2° 49814247993496 2° 49814247993496 2°	Common PLCI Handle Parent Messagenumber	0x101 0x95446B9 0x95442F6 0x0
<	Ш		>		
Voice, Fax & Communication Messages CAPI Messages Image: SIP Image: Sip Capi information about the call selected above or Capi information about the CAPI messages well-chosen on the left below Image: Sip Capi Sip Cap					d above on about the s well-chosen w
[Received] ACK si	p:214395@10.1.42.185:5060 : n07320306317@10 211 1 28-5	SIP/2.0		CAFTINUCACON	wu420 - Requesteu
 [Sent] INVEE SIP: [Received] SIP/2.0 [Received] SIP/2.0 [Sent] ACK sip:00 [Sent] BYE sip:007 [Received] SIP/2.0 RTP (Sender) RTP (Receiver) Audio (Sender) 	0007525590017@10.211.1.285 0100 Trying 0488 Not Acceptable Media 7329396317@10.211.1.28506 7329396317@10.211.1.28506 0200 でおし 1: SIP/H.323 Tab 2: CAPI mes	ious sip/2.0 0 SIP/2.0 communication sages		DTMF Listening Received Transmitted RTP Sending Endpoir Packet count Packets out of time Packetloss	No [None] [None] nt 0 0 0 0 (0.00%)
BT: 00:00:00.000	SM: 00:00:00.000	PM: 00:00:00.000	DT: 27/06/2012	Average delta	0 ms 🗸

Notifications:

- When "Softfax" is used, you can listen / save the transferred voice data.
- If red values are displayed in the right area under "RTP-Sender" / "RTP-Receiver", the files are delayed or not transmitted at all. In this case, check the network and settings for the VMWare. You will also get problems when clicking on the red! Is displayed.
- You will receive information on the SIP messages, e.g. In RFC 3261

11.4 ixi-UMS Business virtualisiert

If ixi-UMS Business is installed in a virtual environment, note the following:

Voice applications are by no means as real-time-prone as fax applications. This is very important in the resource configuration and planning of the virtual environment, as, for example, database servers can deal with time delays much better than fax applications. The intention here is to distribute the resources optimally to the existing VMs.

Basic / general to virtual environments:

• Fixed MAC address

If ixi-UMS Business is installed on a virtualized operating system, please note that the MAC address must be fixed, otherwise the license will be invalid after moving to another server.

• Assigning system resources (resource pools)

In many virtual environments, you can perform a CPU reservation for individual VM clients. If possible, you should assign at least one CPU with all available cores of the ixi-UMS Business VM. In addition, the VM should be allocated sufficient RAM (without ballooning). Thus, the power-reducing swapping out of RAM to the hard disk (swapping) is prevented.

• For VoIP: Configuration of the PSTN gateway (large jitter buffer) as compensation for the RTP differences Not only the time differences of the RTP packets within the virtual environment can lead to a fax break, but also the correction behavior of the PSTN gateway used. Therefore, it is highly recommended to increase the jitter buffer accordingly in order to buffer these time differences sufficiently and prevent crashes.

The following is a few specific configurations

- VMware ESXi Server version 5.5 or higher
- <u>Microsoft Hyper-V</u> environment

11.4.1 VMWare ESXi

The company Te-System, manufacturer of the XCAPI, strongly recommends following configuration of the virtual machines.

In the event of a fault, eg in the case of connection interrupts during transmission, no support is provided if subsequent configurations have not been carried out.

The original document of the company TE-Systems can be requested in ixi-UMS Support.

Introduction

This document is intended to support you with the configuration of the VMware ESXi Server version 5.5 for optimal XCAPI interoperability.

In this guide, we are going to adjust the resource management of the VMware ESXi Server for sufficient system resources that will be assigned exclusively to XCAPI, assuring an operation without the disruptions that are common when sharing hardware resources between several guest operating systems.

At this point, we suppose that the hardware the VMware ESXi Server is running on and the software installations, particularly the VMware ESXi Server itself and the guest operating systems, are already installed properly. Here the vSphere client is used for configuring the VMware ESXi Server that has to be installed separately on a workstation, assuring access to the VMware ESXi Server.

For some extended information on installation procedures regarding the VMware ESXi Server and the virtual machines, please refer to the respective manuals.

Note:

Using the latest VMware ESXi server version, at least version 5.5, is recommended.

Requirements for VMware environments

Transmitting facsimile data in real-time requires the activation of the Pseudo Performance Counters for VMware and XCAPI.

Please note that VMware Snapshots significantly impact the performance and thus interfere the real-time behavior of the media stream within a virtual environment. For this reason VMware point-out that Snapshots shouldn't run in production on a permanent basis for virtual machines. Thus **it's necessarily required that Snapshots won't be used on the guest systems**.

For more details please review the VMware knowledge base entry http://kb.vmware.com/kb/1009402. Please review the knowledge base entry http://kb.vmware.com/kb/1008360 for additional information about VMware performance.

Please take note of the following requirements for VMware environments:

- No VMware Snapshots utilization.
- Enabling the VMware performance counter for real-time based applications and protocols.
- Disabling of the Power Management in the host Bios and vSphere.

Further information, especially in the case of high channel and fax usage, are given in the following documents:

- Deploying Extremely Latency-Sensitive Applications in VMware vSphere® 5.5
- Best Practices for Performance Tuning of Latency-Sensitive Workloads in vSphere[®] VMs
- Performance Best Practices for VMware vSphere[®] 6.0
- Power Management and Performance in VMware vSphere[®] 5.1 and 5.5

Configuring VMware ESXi Server

This guide describes the configuration of the VMware ESXi Server using the vSphere client. We suppose that up to now, the configuration of the VMware ESXi Server was limited to the installation of virtual guest operating systems on the server.

XCAPI License

The license key is amongst other things bound to unique MAC addresses of a network interface. This does not apply to virtual machines as the Mac address can be easily manipulated and thereby this would make an XCAPI license invalid. Please avoid Mac address manipulation in any circumstances after requesting a XCAPI license.

Please bear in mind that this also includes virtual machines movements. At this juncture you will be asked to choose a new Identifier at the first reboot. Without exception you have to select the option Keep its old identifier.

For ESXi server requests about Did you move this virtual machine, or did you copy it? has always to be confirmed with I moved it.

When generating a new identifier by means of Create, the Mac address of the virtual machine will be changed and thus the XCAPI license will become invalid.

You can avoid such issues in advance by allocating a fixed Mac address for the virtual machine before installing the XCAPI. The Mac address must be set to 00:50:56:XX:YY:ZZ (http://kb.vmware.com/kb/507).

The variables XX, YY and ZZ can be valued with:

XX : 00h–3F h, Y Y : 00h–F F h,

ZZ : 00h–F F h.

If the virtual machine will be moved after XCAPI installation, the MAC address can be reverted to the manually defined value afterwards for appropriate use of the original XCAPI license, presuming an untouched virtual machine.

CPU, Memory, Latency Sensitivity

When using VMware 5.x, the latency sensitivity in the virtual machine properties - Advanced must be set to High.

XCAPI - Edit Settings				
Virtual Hardware VM Options	SDRS Rules vApp Options			
▶ General Options	General Options VM Name: XCAPI			
VMware Remote Console Lock the guest operating system when the last remote user disconnects Options				
► VMware Tools Expand for VMware Tools settings				
Power management Expand for power management settings				
 Boot Options 	Expand for boot options			
✓ *Advanced				
Settings	Disable acceleration			
- I Eastle. Inging				
Configuration Parameters (*) Edit Configuration				
Latency Sensitivity	High v ms v			
Fibre Channel NPIV Expand for Fibre Channel NPIV settings				

Compatibility: ESXi 5.1 and later (VM version 9)

OK Cancel

XCAPI - Edit Settings			
Virtual Hardware VM C	Options SDRS Rules vApp Options		
→ 🔲 *CPU	4 🔹 🔹		
Cores per Socket	(*) 2 v Sockets: 2		
CPU Hot Plug	Enable CPU Hot Add		
Reservation (*)	10664 - MHz -		
Limit (*)	Current value: 0 MHz MHz -		
Shares	Maximum: 10664 MHz 4000 -		
CPUID Mask	Expose the NX/XD flag to guest		
Hardware virtualiza	ation Expose hardware assisted virtualization to the g		
👻 🌆 *Memory			
RAM (*)	4096 v MB v		
Reservation (*)	4096 v MB v		
	Current value: 0 MB ory (All locked)		
Limit	Minimum: 0 MB MB V		
Shares	Normal - 327600 -		
Memory Hot Plug			
NUMA Memory Affir	nity		
Virtualization			
	based on the processor type and the virtual machin automatic selection can provide better performance		
	Note: If a selected setting is not supported by the h- the setting is ignored and the "Automatic" selection		
New device: Add			
Compatibility: ESXi 5.1 and later (VM version 9)			

Please consider to reserve 100% of the CPU to guarantee exclusive PCPU access. This helps to reduce CPU halt/wake-up states.

Please note that the number of physical CPUs in the host are above the amount of allocated virtual CPUs. If this is ensured and detected by the VMware ESX Server, no CPU affinity has to be assigned.

Additionally, a 100% memory reservation is required.

Improving Real-Time Performance

Up to a certain degree, the XCAPI can cope with time shifts in the virtual machine which is a general problem when a virtual machine does not have sufficient CPU time due to other time-consuming processes on the host. Without this adjustment, real-time applications like Softfax are not feasible because of gaps in the audio stream which can lead to aborted fax transmission.

Pseudo Performance Counter for VMware ESXi Servers

For setting up the pseudo performance counter for an ESXi server, you need to stop the VM with the running XCAPI and open the property configuration dialog. Beneath the Advanced settings, please open the Configuration Parameters dialog.

🗄 XCAPI - Edit Se	ttings			?₩	
Virtual Hardware	VM Options	SDRS Rules	vApp Options)	
▶ General Options	3	VM Name: D	(CAPI		
VMware Remote Options	e Console	Lock the disconne	Lock the guest operating system when the last remote use disconnects		
▶ VMware Tools		Exp	oand for VMware	Tools settings	
Power manager	ment	Expand for power management settings		nanagement settings	
▹ Boot Options		Expand for boot options		tions	
- Advanced					
Settings		Disable a	Disable acceleration		
		🖌 Enable lo	✓ Enable logging		
Debugging and	statistics	Run norma	illy	•)	
Configuration Pa	arameters		Edit	Configuration	
Latency Sensitiv	rity	High	High 🔹 ms		
▶ Fibre Channel NPIV		Exp	oand for Fibre Cl	hannel NPIV settings	
Compatibility: ESXi 5.1 and later (VM version 9)					

Configuration Parameters				
Modify or add configuration parameter support. Entries cannot be removed.	s as needed for experimental features or as i			
Name	Value			
pciBridge7.virtualDev	pcieRootPort			
pciBridge7.functions	8			
vmware.tools.internalversion	9216			
vmware.tools.requiredversion	9216			
vmware.tools.installstate	none			
vmware.tools.lastInstallStatus	unknown			
migrate.hostLogState	none			
migrate.migrationId	0			
sched.cpu.latencySensitivity	high			
monitor_control.pseudo_perfctr	TRUE			
	T			
	Add Row			
	OK Cancel			

Next, please use the Add Row button for entering the command monitor_control.pseudo_perfctr.

Enable this parameter with value TRUE. Afterwards you can start the VM again.


Warning

Activating this option may cause the XCAPI to trigger a fatal system error.

The requested feature must be supported by the VMWARE environment and must be enabled in the virtual machine configuration file. Please contact the TE-SYSTEMS support for further guidance.

Pseudo Performance Counter support for XCAPI

If the pseudo performance counter has not been enabled, but the XCAPI timer source has been set to VMWARE, this function call will instantly lead to a system error within the related VMware session. Please ensure that the pseudo performance configurations are done before switching the timer source.

For enabling XCAPI pseudo performance counter support, you need to run the configuration tool xfinetune.exe.

This executable can be found in the installation folder of ixi-UMS Business\XCAPI. There, you have to activate the option High Resolution Time Source within the General Settings.

Please select the option VMWARE for the time source parameter.

 Afterwards, you will be informed about the fact that this configuration can only be made when the pseudo performance configurations were made previously.

11.4.2 Microsoft Hyper-V

The company Te-System, manufacturer of the XCAPI, strongly recommends following configuration of the virtual machines.

OK

In the event of a fault, eg in the case of connection interrupts during transmission, no support is provided if subsequent configurations have not been carried out.

The original document of the company TE-Systems can be requested in ixi-UMS Support.

Introduction

This document is intended to support you during the configuration of the XCAPI in a Microsoft Hyper-V environment. For this we are going to adjust the energy options and the clock source of the Microsoft Hyper-V for sufficient timing behaviour, assuring an operation without disruptions which are commonly based on wrong CPU clocking between several guest operating systems and the host. Please note that it is essential testing the Microsoft Hyper-V and VoIP environment for sufficient resource and real-time behaviour.

For some extended information on installation procedures regarding the Microsoft Hyper-V and the virtual machines please refer to the respective manuals. A short installation manual for the XCAPI is available at XCAPI Website.

Improving Real-time Performance

Up to a certain degree, the XCAPI can cope with time shifts in the virtual machine which is a general problem when a virtual machine does not have sufficient CPU time due to other time-consuming processes on the host. Without this adjustment, real-time applications like Softfax are not feasible because of gaps in the audio stream which can lead to aborted fax transmissions.



Query Performance Counter Support inside the XCAPI

For enabling XCAPI Query Performance Counter (QPC) support, you need to run the configuration tool xfinetune.exe. This executable can be found in the installation folder of the XCAPI. There you have to activate the option High Resolution Time Source within the General Settings. Please select the option QPC for the time source parameter. Afterwards, please restart the CAPI application.

Advanced

Core Count	<total cores="" number="" of=""></total>
Core Frequency	<current frequency?<="" processor="" th=""></current>
System Bus Frequency	<current frequency="" fsb=""></current>
Enhanced Intel [®] SpeedStep Tech	Enabled/Disabled
Core Multi-processing	Enabled/Disabled
Intel [®] Virtualization Technology	Enabled/Disabled
Intel [®] VT for Directed I/O	Enabled/Disabled
Adjacent cache line prefetch	Enabled/Disabled
Processor Re-Test	Enabled/Disabled
Processor 1 Information	
Processor 2 Information	

Enhanced Intel SpeedStep(R) Technology

Please review the Bios of the Hyper-V host and disable all related Enhanced Intel SpeedStep(R) Technology settings.

essor Io	lentificatio	n Utilit	y				2
<u>/</u> iew <u>H</u> e	elp						
CPU Te	echnologies	CPUID	Data				
roce	ssor lo	dent	ifica	ation U	tility	int	el
TM)2 D	uo CPU E8	3500 @	3.16	GHz			_
vance	d Intel Proc	Cessor	Techr	nologies			
tion Tec	hnology						Yes
nreading	Technology						No
ecture							Yes
chnolo	gies Suppo	rted					
SpeedSte	ep(R) Techno	ology	Yes	Intel(R) Adva	nced Vecto	or Extensions	No
			Yes	Intel(R) AES	New Instruc	ctions	No
			Yes				
			Yes				
	jew H CPU Te TOCE TM)2 D Ivancee tion Tecc areading ecture chnolo Speed St.	fiew Help CPU Technologies TOCESSOT IC TM)2 Duo CPU E8 Ivanced Intel Proc tion Technology areading Technology acture chnologies Suppo SpeedStep(R) Technology	fiew Help CPU Technologies CPUID TOCESSOT Ident TM)2 Duo CPU E8500 @ Ivanced Intel Processor tion Technology reading Technology reading Technology ecture Speed Step(R) Technology	fiew Help CPU Technologies CPUID Data TOCESSOT Identifica TM)2 Duo CPU E8500 @ 3.16 Ivanced Intel Processor Technology meading Technology recture cchnologies Supported SpeedStep(R) Technology Yes Yes Yes Yes	ijew <u>H</u> elp CPU Technologies CPUID Data CPU Echnologies CPUID Data CPU E8500 @ 3.16GHz TM)2 Duo CPU E8500 @ 3.16GHz Ivanced Intel Processor Technologies tion Technology reading Technology reading Technology ecture cchnologies Supported Speed Step(R) Technology Yes Intel(R) Adva Yes Intel(R) AES Yes Yes	ijew Help CPU Technologies CPUID Data rocessor Identification Utility TM)2 Duo CPU E8500 @ 3.16GHz Ivanced Intel Processor Technologies tion Technology reading Technology ecture SpeedStep(R) Technology Yes Yes Yes Yes	fiew Help CPU Technologies CPUID Data TOCESSOT Identification Utility FOR CPU E8500 @ 3.16GHz TM)2 Duo CPU E8500 @ 3.16GHz Ivanced Intel Processor Technologies tion Technology meading Technology reading Technology re

You could use the Intel(R) Processor Identification Utility to verify the SpeedStep(R) technology support of the CPU.

Power Options

Additionally you might have to disable any Power Options within the Windows host and client. Referring to this, please review also the BIOS settings.



If necessary, the power scheme can be set via the CLI/CMD:

C:\Windows\system32>powercfg.exe -L

Existing Power Schemes (* Active)

Power Scheme GUID: 381b4222-f694-41f0-9685-ff5bb260df2e (Balanced) * Power Scheme GUID: 8c5e7fda-e8bf-4a96-9a85-a6e23a8c635c (High performance) Power Scheme GUID: a1841308-3541-4fab-bc81-f71556f20b4a (Power saver)

C:\Windows\system32>powercfg.exe -setactive 8c5e7fda-e8bf-4a96-9a85-a6e23a8c635c

C:\Windows\system32>powercfg.exe -L

Existing Power Schemes (* Active)

Power Scheme GUID: 381b4222-f694-41f0-9685-ff5bb260df2e (Balanced) | Power Scheme GUID: 8c5e7fda-e8bf-4a96-9a85-a6e23a8c635c (High performance)* Power Scheme GUID: a1841308-3541-4fab-bc81-f71556f20b4a (Power saver)

C:\Windows\system32>

11.5 SSL Support

The web pages for the ixi-UMS Business Configuration and the ixi-UMS Business Portal with the browser-based pages "ixi-UMS Web Journal", "ixi-UMS User Information" and "ixi-UMS Voice-Mailbox Configuration" are provided by default via HTTP on port 8890. You can also publish them via HTTPS.

To do so, the Apache HTTP Server installed with ixi-UMS Business must be set up and an SSL certificate must be deposited.

Start the "ixiHttpsConfig.exe" in the directory ...\ixi-UMS Business\ixi-Framework\Tools\HttpsConfig

ixi-UMS HTTPS Configuration Wizard	– 🗆 X	To use HTTPS a <u>SSL certificate</u> is
For the web applications provided by ixi-UMS, it is highly recomwhether and on which port HTTPS shall be provided additionally Enable HTTPS Port: 443 Refrest FQDN ixi-UMS-Server.domain.de	mended to use HTTPS. Please specify y.	 You can create from the setup a selfsigned SSL certificate, import an available SSL certificate or (with an update) already in the Apache servers available certificate take over.
Use self-signed certificate Import existing SSL certificate	Subject Alternative Name	On the internal network a selfsigned <u>certificate</u> is sufficient to use the websites from ixi-UMS Business.
Help	Finish	
Edit Subject Alternative Name Enter additional host names and/or IP addresses to be included	d in the certificate.	× If a self-signed certificate is to be used, additional "Subject Alternative Name" (SAN) can be specified as DNS name or IP
Subject Alternative Name Type: IP DNS IP 192 168 123 10	dns=ixi-ums-server.domain.net	address during creation. When "Save and Exit" is chosen, the certificate is stored in the
	OK Cancel	Apache HTTP Server. The required restart of the service is queried.

A self-created and self-signed certificate must be imported into the certificate store of the local computer on all computers (which should use this certificate) under "Trusted Root Certification Authorities".

11.6 Rendering of Office Documents

"Office Documents" usually mean word processing files, table calculations and presentation files. The most common formats are:

Word Processing			Table Calculation
File Endings	Software	File Endings	Software
.docx, .doc, .rtf	Microsoft Office	.xlsx, .xlsm; .xls	Microsoft Office
.odt .sxw	OpenDocument	ods	OpenDocument

When e-mails with an attached Office-document shall be sent as fax, this attachment must be "rendered" into a fax-capable format.

In order to be able to render attachments, the respective application must be installed on the ixi-UMS Business machine,.

Tested by estos GmbH for the rendering of "Office-documents":

Microsoft Office from version Office 2010 on OpenOffice.org from version 4.0 on LibreOffice from version 6 on

The Office-package should always be installed "User-Defined - Complete".

After the installation, the applications must be opened with the ixi-UMS Business installation account. All messages and notes must be terminated in such a way that they no longer appear when they are reopened.

Automatic updates should be disabled.

Please bear in mind, that a loss in formatting may occur when for the rendering, another rendering software is used at the server than at the clients.

11.7 ixi-UMS Business Portal in ProCall

The ixi-UMS Business Portal can be made available to the users as a "Custom of tab" in the estos ProCall. If these sides are made available to the users, some settings / options are to be considered:

Open the UCServer Administrator.

Open the Profile in menue "User Management - Profiles"

estos UCServer Administr	ator - WIN-2016E	
File Tools View Hel	Profile	×
Connect Sciences Connect Conne	General Custom Tabs Fax Advanced Websites can be configured from here that will be displayed as a tab in ProCall.]
	URL (http://)	j

Put down the URL of the ixi-UMS Business Portal on the configuration.

Note:

In conjunction with ProCall 6 Enterprise and shared user management in the Active Directory, logon to the ixi-UMS Business Portal can be done via "Single-Sign-On".

To be able to use the shared login the UCServer must <u>be entered</u> in the ixi-UMS Business and the "Trusteworthy Site" must be activated in the Custom tabs.

The ixi-UMS Business server communicates with the estos UCServer via the standard ports 7224 and 7225 (for HTTPS) of the UCServer.

11.8 Creating Coverpages

A cover page consists of several parts:

sia Ala		IXI	-UMS	Fax Vi <i>e</i> v	ver	-		x
	🛛 🗈	Zoom: [•		F			
					G	www.est	os.de	^
	FAX							
Von: Priority: Absender: Empfänger: CC: Betreff:	ASAP Karin Sandmann 030579844 Auftrag Nr. 123 Nachfolgend 1 A	48979 Inhang/Anhäng	Datur te: Auftrag.p	12 Montag, M	fai 30, 2016	15:57		
Sehr geehrt im Anhang Mit freundl	e Damen und H erhalten Sie das ichem Gruß	erren, ; gewünschte	Angebot.					≡
Spatte 1, Zolie 1	Spat	te 2, Zelle 1		Sputhe 3, Zelle 1		Spaile 4	Zella 1	
Spate 1, Zele 2 Spate 1, Zele 3 Spate 1, Zele 4 Spate 1, Zele 5	Spal Spal Spal Spal	te 2, Zelle 2 le 2, Zelle 3 te 2, Zelle 4 te 2, Zelle 6		Spate 3, Zele 2 Spate 3, Zele 3 Spate 3, Zele 4 Spate 3, Zele 5		Spaite 4 Spaite 4 Spaite 4 Spaite 4	Zelle 2 Zelle 3 Zelle 4 Zelle 6	~
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Fax coverpage (crate and change fax.htm)

Layout (crate and change layout.htm)

SMS "Layout" (sms.htm)

VCard (Optional) (vcard.htm)

The single parts are shown below:

Red: coverpage Green: <u>#content</u> tag Blue: layout

For more detailed information, please follow the links.

11.8.1 Adding Coverpage-Folders

The coverpages and layout-files are deposited in a folder. All the inserted pictures must also be stored in this folder. Default paths:

.\ixi-UMS Business \ixi-UMS Kernel\Rconn\Covers

The assignment which user shall use which coverpage is determined in the user administration. There, the **folder name** must be entered. In this folder, all the required files and pictures must be deposited. 160/5000

To make a new, additional coverpage available, only a new folder with the required files must be stored in the "root directory".



11.8.2 Creating or Processing Coverpage

The fax coverpage is defined by the "fax.htm" and therewith is created in HTML-format. Please note that not every HTML-editor can be used.

There are two criteria for the editor to be used:

- 1. Some HTML-editors insert unnecessary "tags" when creating the page, by which the coverpage cannot be processed any more.
- 2. The %PRODUKTNAME% Render Connector processes some "special" HTML-tags, which are not supported by any editor.

Ideal is the use of Notepad (editor) for the change of the fax.htm.

As grafical-based HTML-editor, the free "NVU" in version 1.0 has been tested. In order to remove the "tags" added by it or convert them into a character valid for the ixi-UMS Business Render Connector, a "CoverPageConverter" is added from ixi-UMS Business Version 5.85 on.

The "Converter" is is deposited at "ixi-UMS Business Kernel\Rconn\Tools" after the installation. The language can be changed in the "CoverPageConverter_localization.ini".

Create your coverpage in NVU:

🐵 Unbenannt [fil	://fax.htm] - Nvu	
<u>D</u> atei <u>B</u> earbeiter	<u>A</u> nsicht Einfüg <u>e</u> n F <u>o</u> rmat Ta <u>b</u> elle Extras <u>H</u> ilfe	
Neu Öffnen	Speichern Publizieren Vorschau Ziel Link Grafik Tabelle Formular Rechtschreibung Drucken	NVU
Normaler Text	· ▲ A A B / U 結는 토호크를 66	
(keine Klasse)	Variable Breite 🔽 🔍 🗅 🖓 I II 🚍 🗃 🌬 🖗 🕬 🍸 🔶	
×	Unbenannt)	**
✓ Nvu Seitenver	492px 277px	
Ansicht: Alle Da		
Seiten bearbeiter	Servonic GmbH	
Name	Image: Several state Ilzweg 7, 82140 Olching Image: Several state Image: Several state Image: Several s	
	An / To: <#To FmtString="1" > Von / From: <#From FmtString="1"> Fax-Nr. / Fax-No.: <#FacsimileTelephoneNumber> Telefon-Nr. / Telephone-No.: <#TelephoneNumber> Datum / Date: <#Date FmtString="c"> Nachricht / Message: <#Subject> 	
1		

Please pay attention to the following:

- Pictures to be inserted should be stated in the following form **including** the picture size: <#img border="0" src="ixi-UMS Business.JPG" width="107" height="64">
- Please take care that the page is not too wide.
- The font types used must be available on the ixi-UMS Business Server.
- The font sizes should not be too small as there is a loss of quality with the fax sending.

Store the page as "fax.htm" on the hard disk. The "page title" asked for then is irrelevant.

Copy the folder with the "CoverPageConverter.exe" to the machine, on which the fax.htm is stored.

E:\CoverPageTest\Tools	
🚱 🕞 🗸 🖌 CoverPage Test 🔻 Tools 🔹 🖌 🔽 🛛 Tools durchsuc 😥	
<u>Datei Bearbeiten Ansicht Extras 2</u>	Start the EXE by double-click.
Organisieren ▾ Öffnen Neuer Ordner 🕮 ▾ 🔟 🔞	
📙 CoverPageTest 🔼 Name 🔺 Gr	Select the created fax.htm.
CoverPageConverter.exe	
CoverPageConverter_localization.ini	Coloret the destination folder which many he the
IXI-UMS CoverPatch	Select the destination folder, which may be the
Qualidatais El/CovarDageTert\fpx.htm	Same one.
	fease take into account that then the originat
Ziel: Durchsuchen	fax.ntm is overwritten.
Start	
@ Speichern unter	When both folders are selected, please click on
Speichem in: 📜 ConvertierteDatei 🔍 🗢 🖻 📸 🖛	"Start".
Name	After the processing, a respective message
Es wurden keine Suchergebnisse gefunden.	appears.
	Information
Dateiname: Jfax.htm Speichem	Bearbeitung abgeschlossen.
Dateityp: IXI-UMS CoverPage Abbrechen	
	ОК

When the fax.htm now is opened in the web browser, it sould be displayed like that:

<pre></pre>	On the top left: <#head>
Telefax serVonic	GmbH
<#img border="0" src="IXI-UMS.JPG" width="107" height="64"> IIzweg 7, 82140 Olchi Telefon: +49 8142 47 Fax: +49 8142 47994	The picture is NOT displayed!
An / Te: <#To FmtString="1" >	
Von / From: <#From FmtString="1">	
Fax-Nr. / Fax-No.: <#FacsimileTelephoneNumber>	
Telefon-Nr. / Telephone-No.: <#TelephoneNumber>	
Datum / Date: <#Date FmtString="c">	
Nachricht / Message: <#Subject>	
<#Content>	

Open the fax.htm and check the coding:

/ fax.htm - Editor	- - ×
Datei Bearbeiten Format Ansicht ?	
<pre><!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"> </pre>	
<pre><meta 790px;"="" content="text/html; charset=utf-8" http-equiv="Content-Type" width:=""/></pre>	-
	• //.

If another coding is entered, please change this here.

Copy the fax.htm and all the required pictures to the <u>respective folder</u> at ...\ Rconn\Cover Restart the Render Connector and send a fax.

After the rendering or the sending, the result should look like this:

💑 IXI-UMS Fax Viewer		<u>- 🗆 ×</u>
Datei		
K D D 🖒 Zoom: •]	
		^
Tolefer	conVonia CmbH	
Telefax	Servonic Ghibh	
ums	llaweg 7, 82140 Okhing Telefor: +49 8142 47990 Fac: +49 8142 47990	
An / To: +49895478521144<+49895478521144@ixifax.com>		
Von / From: Administrator		
Fax-Nr. / Fax-No.: +49 8142 47997555		
Telefon-Nr. / Telephone-No.: +49 8142 4799555		
Detum / Date: 04.02.2011 14:58:40		
Nedwicht / Message: Ihre Anfrage zu Kunde Mustermann		
Sehr geehrter Herr Vertriebspartner,		
vielen Dank für das heute mit ihnen geführte Telefongespräch.		
Nachfolgend erhalten Sie die von ihnen gewünschten Informationen zu dem Projek	kt bei Ihrem Kunden "Firma Mustermann".	
Für die Integration von IXI-UMS in die vorhandene IT-Struktur ist im Vorfeld zu kla	ren:	
weicher Maliserver wird eingesetzt In weicher Ad und Form ist eine Benutzerverwaltung vorhanden Wie groß ist das Faxaufkommen		
Auf Grund dieser Informationen ist es mir dann möglich ihnen ein detailiertes Ange	ebot zu erstellen.	
Als Vorabinformation beachten Sie bitte, das die Anbindung unserer Software and VollP: SIP oder H.323	die Telefonanlage möglich ist über:	
ISDN: S0, S2M, mit den Protokollen, DSS1 oder Qsig		
Die zu wählende Anbindung ist abhängig von der eingesetzten Telefonanlage und und "Fernabfrage".	den zusätzlich gewünschten Funktionen im Bereich "Voice"	
Je nach Anbindung stehen Ihnen zur Verfügung: IXI-UMS VoIP Connect		
ISDN Karte Funkwerk Router		
Ich hoffe ihnen weiter gehoffen zu haben.		
Mit freundichem Gruß		
serVonic GmbH		
		-
<u></u>		
Seite 1 / 1		
		111

Depending on the fax viewer and the use of a <u>Layout.htm</u>, only the printed part or a complete DIN A4-page are displayed with a TIFF-format.

We highly recommend that you print the result and <u>adjust the margins</u>, if necessary.

If an ixi-UMS Business FAPI Connector with txt-files as attachment is deployed, a special Fax.htm may be required. The font type and maybe the font size must be defined in this:

```
Example:
Font Type = Courier New
Style = Bold
<html>
```

<head>

```
<meta http-equiv="Content-Type" content="text/html; charset=utf-8">
<#head>
```

</head>

<body>

```
<strong><font face="Courier New"><#Content></font></strong></body>
```

11.8.3 Adjusting the Print Area

The bodytext of a fax is printed "into" the coverpage.

Depending on the structure and the content of the coverpage, problems with the print area may arise. The margins are too narrow or the text is printed into the footnote inserted in the Layout.htm.

The width of the margins (print area) can be adjusted in the ModMHTML.ini at ..\RConn\Mod.

[Margins] # in cm Left: Left=1.5 Right: Right=.25 Top: Top=1 Bottom: Bottom=1

After having changed the values, the ixi-UMS Business Render Connector service must be restarted.

11.8.4 Tags and Attributes

On the coverpage, only information can be displayed that are available in the outgoing message (Tmp-File). Basically, the following information is available that is used in the coverpage:

Header Fields in Tmp-file	Source / Default LDAP-Field	HTML-Tag in Coverpage
From:	Mime-Header	<#from>
То:	Mime-Header	<#to>
cc:	Mime-Header	<#cc>
bcc:	Mime-Header	<#bcc>
Date:	Mime-Header	<#date>
Subject:	Mime-Header	<#subject>
Importance:	Mime Header	<#Priority>
Attachments:	Mime Header	<#Attachments>

Please note the remarks at "Format Hints and Options" as well.

11.8.4.1 Sender Information

The sender information delivered by ixi-UMS Business are written into the outgoing message (tmp-file) and then can be adopted into the coverpage "fax.htm".

Header Fields in the Tmp-file	Source or Default LDAP-field	HTML-Tag in Coverpage
X-COVERINFO-Businessfax:	facsimiletelephonenumber	<#facsimiletelephonenumber>
X-COVERINFO-Businessphone1:	telephonenumber	<#telephonenumber>
X-IFAXDATA-SenderID:	IXIISDNOriginatingAddress (from the ixi-UMS Business user data attribute)	<#IXIISDNOriginatingAddress>
X-IFAXDATA-DChID:	IXIFaxSenderNumber (from the ixi-UMS Business user data attribute)	<#IXIFaxSenderNumber>
X-COVERINFO-Company:	company	<#company>
X-IFAXDATA-Department:	department	<#department>
X-COVERINFO-Address:	streetAddress, postalCode l - physicalDeliveryOfficeName	<#address>

Header Fields in the Tmp-file	Source or Default LDAP-field	HTML-Tag in Coverpage
X-COVERINFO-Street:	StreetAddress	<#StreetAddress>
X-COVERINFO-StreetAlternative:	Street	<#StreetA>
X-COVERINFO-PostalCode:	PostalCode	<#PostalCode>
X-COVERINFO-Location:	l	<#City>
X-COVERINFO-Office:	physicalDeliveryOfficeName	<#Office>

11.8.4.2 Format Hints and Options

With some of the "Tags", you can determine how the value is displayed, other representations are definitely defined. Please find a list of the characteristics of the tags in the following:

HTML-Tag	Remark
<#address>	Entry until version 5.90; the entry - as until now - consists of: StreetAddress, PostalCode l - physicalDeliveryOfficeName. From version 5.90 on, the fields to be read out are determined by the entry of the fields in the % PRODUKTNAME% SMTP Connector.
<#from> <#to> <#cc> <#bcc>	Must be entered with with format specification. Example: <#From FmtString="1"> FrmString: 0: Display name and Address 1: Display name only 2: Address only 3: Everything before the @ of the e-mail address / with IMCEA including the decoding/removal If no display name is available, the e-mail address is entered as display name instead. Exception 1: no letters before the @: -> everything before the @ is used as display name Exception 2: the address begins with IMCEA -> everything before the @ is used as display name, IMCEA is decoded/removed
<#Attachment>	Insert some information about the message attachments, can contain the following parameters: \$(attno)=number of attachments \$(attlist)=comma-separated list of attachments Example:<#Attachments label="subsequently \$(attno) attachment/s: \$(attlist)" >
<#Date>	The string can contain specifier to format the message date meeting your needs. Example: <#Date FmtString="dddd, mmmm d, yyyy hh:mm">
<#Priority>	The tag is replaced by the display text corresponding to message priority. <#Priority high="URGENT" normal="ASAP" low="FYI">
<#VCard>	Inserts the <u>vCard template</u> after replacing the tags in it. Will only be applied if the message contains a vCard file.
<#Content>	Mandatory if the text shall be sent out of the mail body.

11.8.5 Fax Layouts

The Layout.htm, among other things, defines the size of a page. When a Layout.htm is applied, it is imperative that it is in the correct format. The layout file is always required when the same information shall appear on every page of the fax, e.g. a bank account in the footer or a watermark.



You find an example file with footing line in the folder:....RConn\Covers\examples

You have to take care that only "absolute" position descriptions can be made, e.g. no percentage descriptions can be made with column width.

For the centering, "align="center" is not possible in every case.

www.estos.de	Example:
	<div style="position: absolute; top:1030px; left:30px"> estos GmbH Petersbrunner Str. 3a</div>
	82319 Starnberg
	 2te Spalte
	 3'te Spalte
	
	Tel: +49 8142 479943 br>
	Fax: +49 8142 479943
	Mail: vertrieb@estos.de <u>></u>
Sectors State To split Projects Married State Bring 7 The Split Projects Projects Projects	
In 22 Carely Not Service (Not Service)	

The length of a page is approx. 1080px. When a footer is inserted (see example), the upper table height must be stated there (e.g. top:1030px).

For a test, the Layout.tif must be deleted in the cover folder and a new fax has to be sent by the Render Connector. A new Layout.tif is created.

If the footer is very high or if the text in the body is printed into it, the "margin" (printable area) can be adjusted in the ModMHTML.ini at ..\RConn\Mod.

- The layout-file is deposited as letter paper at EVERY page. If the layout-file has a footer and attachments (Word, PDF-files) are sent, for example, you have to take care that they have an adequate margin for the footer.
- () When using the MS Office Viewer, display errors may occur, as the length of the page is not displayed properly.

The test should always be done with a fax with 2 or more pages.



When checking the Layout.tif please take care, that this TIF-file is really in DinA4-format!

If no "fax layout" is needed, the layout.htm and layout.tif in the folder can be deleted.

11.8.6 vCard Templates

The vCard template file (vcard.htm) can be used in order to insert data from a vCard attachment file in the message into the resulting fax or sms. Like the coverpage file the vCard template file contains special HTML tags (<#TagName Attributes>) which will be replaced by the corresponding values in the coverpage file.

The following tags can be used:

- Tag
- JobTitle
- Name
- Email
- BusinessWebPage
- HomePhone
- Pager
- Mobile
- BusinessPhone
- BusinessFax
- Department
- Office
- CompanyName
- StreetAddress
- PostalCode
- Nation
- Region
- Locality

11.8.7 Creating Signatures for Fax



Step 2: Insert the signature

Copy the signature image files to the appropriate message header directory.



The image file can be bmp, gif, jpeg or png

• Insert an img custom link in fax.htm (i.e. the fax cover page). In order to do this, first you have to insert the signature file by using an ordinary HTML img tag. Secondly, edit the HTML source code and make the img tag a custom tag by replacing it with #img.

Step 1: Create a Message Header for every user

- Create a subdirectory in the covers directory for every user
- Copy the default message header files in every directory



Step 3: Assign Cover Pages to users

Now you can assign the cover pages to the appropriate users by setting the message header property in your user configuration. The following shows this process for the ixi-UMS Business Exchange Connector:

- Select the user, you want to modify and right click on it
- Select "IXI-Properties" and set the message header.
- Now send a test message via Outlook and the signature will be attached automatically.



11.8.7.1 Creating a Signature in MS Outlook

Options	2 ×		
Preference	s Mail Setup Mail Format Spelling Other Delegates		
Message fo	ormat		
	Choose a format for outgoing mail <u>and change advanced settings.</u> Compose in this message format:		
	Internet Format International Options		
HTML form	at		
	Reduce the file size of the message by removing formatting information that is not necessary to display the e-mail message		
	Rely on <u>C</u> SS for font formatting		
	Sa <u>v</u> e smart tags in e-mail		
Stationery	and Fonts		
Use stationery to change your default font and style, change colors, and add backgrounds to your messages.			
	S <u>t</u> ationery and Fonts		
Signatures	•		
al a	Create and edit signatures for outgoing messages, replies and forwards.		
A	Signatures		
Editor optic	ons		
	Change the editing settings for e-mail messages.		
	Eutor Options		
	OK Cancel Apply		

Signatures and Stationery

E-mail Signature	Personal Stationery
Sele <u>c</u> t signature t	o edit
Sincerely	
Delete	New Save Rename
Edi <u>t</u> signature —	
Calibri (Body)	▼ 11 ▼ B <i>I</i> <u>U</u> Au
Sincerely yo	urs,
Sandra F	Paal
Sandra Paul	
Iviarketing	
<u></u>	OK Cancel

Step 1: Set "Message Format" to HTML

Select Options | Mail Format. Make sure that the "Send in this message format" is set to HTML.

Step 2: Create a new Signature

- Create a new Signature file with the Signature Picker and make it your default signature

- In Windows Explorer search for this Signature file

- Edit the Signature file with your favorite HTML Editor and insert a link to the signature image file.

Note: The image file must be gif, jpeg, bmp or png

- Create a new message in Outlook. The message will contain the signature

you created (see below). Now you can send this message as fax.

11.9 Performing the schema extension

An extension of the schema for ixi-UMS is only required If there is no Microsoft Exchange Server, but the user administration shall be done in the AD

By default, one of the "extensionAttributes" for the storage of the ixi-UMS Business user data created by MS Exchange is used.

If there is no MS Exchange Server, but user administration should be done in the AD (for example, when using an IBM Domino), a schema extension must be performed and the "ixiumsUserData" attribute added.

An extension of the schema can only be

- done by a user who is a member of the "Schema Admins" group and" Enterprise Admins "group and
- performed on a domain controller, the schema master role owner (also FSMO Role Owner). By default, the first domain controller that has been installed has this role.

The server name on which the schema extension can be performed is displayed at the beginning of the setup.

But you can also determine it yourself:

Allow the modification of the schema on the Schema Master

If you want to find out which domain controller is the schema master role owner or want to allow the modification of the schema on another domain controller, proceed as follows:

- Register the "Active Directory-Schema" snap-in by calling start -run "regsvr32.exe schmmgmt.dll"
- Open the "Active Directory-Schema" snap-in by means of MMC
- Click on Active Directory Schema with the right mouse button and choose "Operations Master"
- The Operations Master is also the Schema Master

- If you want to have another domain controller as Schema Master, you have to connect with this machine first and then transfer the Operations Master Role on it

- Click on "Schema may be modified on this machine" and OK after that

To perform a schema extension, proceed as follows:

<u>Download the schema extension setup</u> from the ixi-UMS Business Web Configurtaion and copy the "ixi-UMS Active Directory Schema Setup.exe" to the domain controller that is the schema master role owner.



Start the "ixi-UMS Active Directory Schema Setup.exe" and run the setup und click on "Next" to serch the Schema Master and start the schema setup.

Note:

You can cancel the setup later.

 ixi-UMS Active Directory Schema Setup 	You are reminded that a schema extension in Active
Welcome to the ixi-UMS schema extension setup	
Setup will add a new attribute in your Active Directory schema. This is used for ixi-UMS User Management. Warning: The inserted attribute can not be removed afterwards. Please read the help to decide if you want to extend the schema.	Click on "Next" to find the schema master.
< <u>B</u> ack <u>N</u> ext > Cancel Help	
 ixi-UMS Active Directory Schema Setup 	On the server specified here, the schema extension can be performed.
Detection of the schema master	It also verifies whether the "ixiumsUserData" attribute already exists.
The schema extension can only be performed on a domain controller that holds the schema master role. Current scheme master: SRV2019STDDE.germany.net Schema extension version 6 found.	If you have started the setup on another server, quit it with the "Abbrechen" button and run the setup again on the specified server.
< <u>B</u> ack <u>Next</u> Cancel Help	Otherwise, click "Next" to continue the setup.
ADSchemaSettxi × The schema extension in Active Directory can not be undone. Are you certain that you wish to extend this schema now?	Again, a hint appears that a schema extension in Active Directory can not be undone. Click "Yes" to expand the schema.
Ja <u>N</u> ein	

 ixi-UMS Active Directory Schema Setup 	×
Result	() estos
Schema extension successful! Log file:	
26/08/2020 11:58:48 [INFO] Start schema extension on schema mast. 26/08/2020 11:58:48 [INFO] Attribute 'ixiums-UserData' created 26/08/2020 11:58:48 [INFO] Trigger schema cache successful 26/08/2020 11:58:48 [INFO] Set user attributes successful 26/08/2020 11:58:48 [INFO] Trigger cache successful 26/08/2020 11:58:48 [INFO] Schema Setup successful 26/08/2020 11:58:48 [INFO] Schema extension finished.	er 'SRV2019ST(A S
< Back Finish Cancel	Help

You will see a summary of the setups.

If the schema could not be executed on the aboveidentified server, the user with whom you are logged on may have no authorization to extend the schema.

Log on with a user who is a member of the "Schema Admins" group and "Enterprise Admins2 group, and then run the setup again.

11.10 Export Journal Data

The ixi-UMS Business Journal is stored in an SQL database. These data can be exported via various tools via ODBC for further evaluation.

11.10.1 Export of the Journal Data by ODBC

The journal data base can be exported into an Excel- or Access-file by means of the tool "IBQuery" or directly by ODBC.

FireBird ODBC Setup			×
Data Source Name (DSN)		Driver	
IXI-UMS_Journal		IscDbc	•
Description			
IXI-UMS Kernel Journal			
Database			
D:\serVonic\IXI-UMS Kernel\DB\IXI	IUMSDB.gdb		Browse
Client			
d:\serVonic\IXI-Framework\Firebird2	?\bin\fbclient.dll		Browse
Database Account P	assword	Role	
SYSDBA **	*****		
Character Set		1	
NONE	Services		est connection
Options Transaction read (default write) nowait (default wait) Lock Timeout Dialect • 3 • 1 Safe thread	Extended i v quoted sensitiv autoqu Set null fie	dentifier proper identifiers ve identifier oted identifier Id SCHEMA	ties
ОК	Cance		Help

A System-DSN for the **local** access is st up during the installation of the ixi-UMS Business Setup, via that the data base access is executed.

If a backup of the data base shall be accessed, the respective data base file must be chosen.

You can create an own query for the data export or use the queries delivered by ixi-UMS.

Basically, you should proceed as in the following:

Open MS Excel on the ixi-UMS Business Server.

Depending on the Excel Version choose the item:

- Excel 2003 "Import External Data" in the menu "Data".

- Excel 2007 "Data - From Other Sources - From Microsft Query"

You now can make use of the queries delivered by ixi-UMS Business via "Import Data" or create your own query via "Create New Query".

Query Wizard - Choose Columns		×
What columns of data do you want to includ Available tables and columns:	le in your query? Columns in your query:	× ×
JVIEW Preview of data in selected column: Preview Now Options	< Back Next > Cance	3

At ...\ixi-UMS Kernel\Tools\Journal-Query, you can find the following queries:

File Names	Columns that are imported
Journal-Basic.xls	BONUDTYPE
Journal-Basic.dqy	SERVICE
Journal-Basic_x64.dqy	SENDERADRESS
	MAILFROM
	RECIPIENTADDRESS
	SUBJECT
	FAXNUMOFPAGES
	TRANSTIME
	TRANSDURATION
	RESULTMESSAGE
Iournal-Advanced xls	like above and additionally
Journal-Advanced.dgy	FAXREMOTESTATION ID
Journal-Advanced x64.day	CONNECTOR
	PRIORITY
	MESSAGE ID
	RETRYCOUNT
	RETRYCOUNT

The explanations to the single columns can be found at "Data Base Fields".

In order to **make use of an available query**, just open the respective *.dqy-file by double-click and import the data. The columns are displayed in the original column description.

11.10.2 Remote Access by ODBC

The query by ODBC can be configured on any Windows operating system.

Whether the 32bit or 64bit ODBC-driver is required depends on the bit-version of the application, with which the connection shall be accessed.

In order to access the ixi-UMS Business journal database from another machine by ODBC, the following procedure is required:

Remark:

If IBQuery shall be executed at a client, this means not at the ixi-UMS Business Server, please copy the entire folder "DB-Query" from the directory ...\IXI-Framework\Tools to the client. All the required data are contained in it.

- Copy the entire folder "Odbc32" or "Odbc64" from the directory ...\IXI-Framework\Firebird2\ to the machine, on which you want to start the query.
- open a CMD with admin rights
- Register the "OdbcFb.dll" with regsvr32.
- Create a System-DSN at "System Control Administration Data Sources" and select "Firebird/Interbase(r) Driver".

FireBird ODBC Setup	×
Data Source Name (DSN) Driver	
IXI-UMS_Journal IscDbc	•
Description	
IXI-UMS_Journal	
Database	
10.10.138: <pfad>\IXI-UMS Kernel\DB\IXIUMSDB.gdb</pfad>	Browse
Client	
<pfad>\fbclient.dll</pfad>	Browse
Database Account Password Role	
SYSDBA *****	
Character Set NONE Services T	est connection
Options Transaction Transaction Image: Construction of the second s	rties
OK Cancel	Help

At "**Database**", please enter the IP-address of the ixi-UMS Business Server, then a colon and the LOCAL path to the data base (at the ixi-UMS Business Server).

At "**Client**", please browse to the folder "Odbcxx" and select the file "fbclient.dll".

Enter the following connection data: **Database Account:** The user name is "sysdba".

Password: With the installation of theixi-UMS Business, the password "IXI-UMS" is assigned by default.

Now you can access the journal database of the ixi-UMS Business from this machine.

11.10.3 Journal Export with IBQuery

In order to analyze the journal data, they can be exported by means of the delivered tool "IBQuery". You can get the tool "IBQuery" in the Internet free of charge; with it, you can administer the "Firebird" data base used by ixi-UMS Business. The query can be configured on any 32bit and 64bit Windows operating system.

Remark:

If IBQuery shall be executed at a client, this means not at the ixi-UMS Business Server, please copy the entire folder "DB-Query" from the directory ...ixi-UMS Business\IXI-Framework\Tools to the client.



Database Conn	ection Editor		×
	lias:		
	KI-UMS Kernel	•	Ø Ø
	● Local Server () <u>R</u> emote Server	
<u>S</u> erver:		Protocol:	7
Database D:\setVor	<u>file:</u> pic\IMLUMS_Kernel\DB\		
D. (Servio		WAIOMODD.gdb	<u> </u>
Connectio	on parameters		
Username:	sysdba	<u>C</u> harset:	•
Password:	******	SQL <u>D</u> ialect: 3	
<u>A</u> dditional p	parameters:		
Create		OK	Cancel

Operation:

- 1. Execute the IBQuery.exe at ..\IXI-Framework\Tools
- 2. Please go to "Session" and then "Connect to database...".

Alternatively, you can use the connect-symbol in or the shortcut "Ctrl-N".

3. The "Database Connection Editor" opens

Alias: Enter any name for the connection here.

Local Server can be used if you are on the ixi-UMS Business PC. **Remote Server** is the generally valid setting. It can be used on theixi-UMS Business PC as well as from any client.

Server: Enter the IP-address of theixi-UMS Business. This value can only be edited if you have chosen "Remote Server" in advance.

Protocol: Choose TCP/IP. It is the same here: This option can only be edited in "Remote Server" mode.

Database file: Enter the path to the data base here, always in a way as if you are on theixi-UMS Business PC. If you access the data base from a client, you cannot use the browse-dialogue!

Username: The user name is "sysdba".

Password: With the installation of the IXI-Framework, the password "IXI-UMS" is assigned by default. See IXI-Framework Manual.

REMARK: You have to enter the passwords and user names without quotation marks.

Charset: Please leave these fields blank.

SQL Dialect: Here, the SQL Dialect 3 must be chosen imperatively.

Aditional parameters are not required.

After having clicked on OK, the data base is opened.

4. In order to open the journal, you have to go to "Tables" and then to "Journal". In order to be able to see the journal data, you now have to switch to the tab "Data".

🧱 MiTeC IB Query - [IXIUMSDB.gdb on BA	KDC (Local)]	- [Table - [301	JRNAL]]	
🍡 🍡 🖀 🎜 🥙 🔺 🔜 🚷	🛅 🕕 🗄 Se	ssion <u>T</u> ools <u>S</u>	ervices <u>W</u> indow <u>H</u> elp	
Object Explorer ×	onstraints 🗍	Indices Depe	endencies Triggers DDL	Data Grants 🛛 🖡 🕨
Server: BAKDC (Local)	i 📼 👔 E		2 🗔 🗡 🗐 🤉 Filter	»
IXIUMSDB.gdb (SQL Dialect 3)	BOUNDTY	P SERVICE	SENDERADDRESS	MAILFROM
Domains (7)	▶ OUT	VOC	-	ixi-ums kernel
E Tables (3)	IN	VOC_CALL	-	•
CALLS	OUT	FAXG3	-	ixi-ums kernel
JUBS	IN	VOC_CALL	-	•
	IN	FAXG3	3496	•
H B Fields (38)	IN	FAXG3	3496	•
	IN	FAXG3	3496	•
ters (2)	VARCHAR	(1 VARCHAR(1	VARCHAR(32)	VARCHAR(64)
🚽 👩 Procedures				•
🖶 🏪 Triggers (2)	.44	4		· / V
🖶 📴 Generators (2)		· · · ·	* -	
🔄 🔂 Exceptions 📃	Fetch Count: 7			
🕵 sysdba 🛛 🗞 ASCII 🛛 🗖 Auto	DDL 🔁 D:'	\serVonic\IXI-UN	MS Kernel\DB\IXIUMSDB.gdb	1.

5. Press the export-symbol 🕒 . The Export Wizard is opened.

🛃 Export Wizard	
What do you want to do? Choose export options and file for export, then press [Next]	
Exported statement:	
select * from JOURNAL	×
CSV C Raw C XML C Printer	
CSV settings Separator:	
Filename:	
JOURNAL.csv	-
Next >	Cancel

Here you now can determine the format for the export and the path.

Export type: Normally, CSV is used, as this format can be processed e.g. in Excel and also OpenOffice.

Enter the file name including path at "Filename" or use the button "Browse".

6. Click on "Next" in order to execute the export. den Export auszuführen.

11.10.4 Data Base Fields

All the available columns of the ixi-UMS Journal Data Base are described in the following. The German description is used for the <u>Export by ODBC</u> in the XML-templates.

For reasons of completeness, all the available columns are described, no matter whether they are needed for an analysis or not.

The order corresponds with the order, which is written into a table with a journal export without query criteria.

For the analysis of the journal data, the field contents marked with "internal use" are irrelevant.

Fieldname	Description	
RECORD_ID	Internal use - primary key	
CALL_ID	Internal use	
BOUNDTYPE	Information whether this is an incoming or and outgoing message Values: in, out	
SERVICE	Information about the type of the message Values: FAXG3, FAXPOLL, VOC,SMS, ALERT = used services, connection OK FAXG3_CALL,VOC_CALL = not clear because the connection had been interrupted UNKNOWN = could not be detected	
SENDERADDRESS	CallingPartyNumber= (D-channel) sender number	
MAILFROM	Information of the "Mail From"-field with outgoing messages. This can be an e-mail address (SMTP) or a call number (e.g. SAP), depending on the connection	
RECIPADDRESS	CalledPartyNumber - number to which the message is sent by ixi-UMS Business	
ORIGRECIPADDRESS	Recipient number as entered by the user in an outgoing message	
CHARGE	Must be transferred by the PSTN to ixi-UMS Business with SMS: number of the single messages	
BILLINGCODE	Information of the cost center from the user properties	
ASSOCFILENAME	Information for internal processing - Internal use	
SUBJECT	Subject of the message	
FAXTRANSSPEED	Only with fax messages	
FAXNUMOFPAGES	Number of the transmitted fax pages	
FAXRESOLUTION	Only with fax messages	
FAXREMOTESTATION_ID	Only for outgoing faxes, ID of the remote station	
FAXLOCALSTATION_ID	Corresponds with the sender call number, made up of the license and the fax sender number of the user. This number is sent in the header as sender number	
TRANSTIME	Date and time the entry was written into the journal	
TRANSDURATION	Transmission time, duration the channel was busy in milliseconds	
RESULTCODE	Final result (as code) after the connection was terminated; passed on from CAPI to ixi-UMS	
RESULTMESSAGE	Translation of the final result code into text	

CONNECTIONCODE	ISDN protocol information that gives a cause for a disconnect		
CONNECTIONMESSAGE	Translation of the connection code into text		
TRANSMISSIONCODE	ISDN protocol information that provides information about transmission errors		
TRANSMISSIONMESSAGE	Translation of the transmission codes into text		
CONNECTOR	Information from which ixi-UMS Connector the outgoing message has been sent		
PRIORITY	Priority of the outgoing message		
CONNECTOR_ID	Internal description of the ixi-UMS Connector		
BCHANNEL	Information via which channel the message had been sent or received		
SDNCONTROLLER Controller	Information via which controller the message had been received or sent		
CHARGELOCCURRENCY	Must be passed on from the PSTN to the %PRODUKTNAME% Kernel		
URL	Information whether and on which script the incoming call had been routed		
ROUTEMETHOD	Information whether and how theixi-UMS Business passed on the calls: DDI, REDIRECTING, SUBADDRESS, CALLINGPARTY, DTMF		
JOB_ID	Information for internal processing - Internal use		
USER_JOB_ID	Currently is not used		
MESSAGE_ID	If a message ID is transferred in the outgoing message, it is entered here. If no message ID is entered, theixi-UMS Business generates a new, unambiguous one.		
FINALFLAG	 With the last connection try of a job, FINALFLAG is set to 1, at all the previous jobs, it is 0. When the value is 1, the job is displayed in the journal. All the other connection tries are displayed in the job details. VALUES: 0 - not final entry for job 1 - final entry for job 		
RETRYCOUNT	States, which transmission try for outgoing messages the entry represents. VALUES: Depend on the configured connection retries in the spooling		

11.11 Create a license offline

The ixi-UMS license is hardware-based and must be created and activated online. If your computer does not have a connection to the Internet, you can create the license on another computer or via the smartphone.

Licenses	estos ixi-UMS Business Lizenz Verwaltung	× Open the license management and enter your product key.
Licenses	Description Amo License No licenses available Über Hinzufügen können Sie vorhandene Lizenzen eingeben oder Tage laufende Trial Lizenz herunterladen. Enter license Enter license Enter the license as it is printed on the license card. [4AVH113X-ZRWDXLHT-2MDVK1AX-ZUF5XCL8] Wenn Sie noch keine Lizenz besitzen können Sie eine T beantragen und den Treiber 45 Tage testen. Ok Control	er Online eine 45 Test-Lizenz
		Ok

Click on the "Show Details" link to view directly the options for offline licensing, or click "Link license online" to try online licensing.

ESTOS License Tool
Link license to hardware online The entered license must be linked to the hardware of the system before use. To link the license a connection to the license server will be established.
Link license online
Show details Cancel

You can now scan the QR code and go directly to the web page for licensing

or

open the link "<u>http://www.estos.de</u>" in the local web-browser and copy it into a web-browser on another computer.

If you selected "Show details" or could not establish a connection to the license server, you will see the selection below.





In this case, automatically download a license file after a short time.

P	estos ixi-UMS Busin	ess Lizenz Verwaltung
Licenses		
	Pescription	Amo License
	No licenses available Über Hinzufügen können Sie vorh Tage laufende Trial Lizenz herunte	andene Lizenzen eingeben oder Online eine 45 erladen.
	Add 💌 Remov	e Hardware ID: A146E018
	Lizenz hinzufügen Lizenzdatei hinzufügen	Ok

The link or CR code generated by the license tool contains all necessary information for generating the license.

If you purchased a **ixi-UMS Business without XCAPI** (ixi-UMS Business TDM), you will be issued with a license code, which can be entered into the license tool. See the left.

If you purchased **ixi-UMS Business without XCAPI** (ixi-UMS Business SIP), NO license code will be issued.

Online License Request Form

۰.		L
	"checksum": "7c87e5de55216f0f6123df2bf33b30448c6d064e",	
	CODE: 4CQIIIINS123931AQ66Q60AQ04161503;	l
	"hwid": "A146E018",	l
	"language": "1033",	l
	"method": "bindlicense",	l
	"productid": "26",	l
	"requestversion": "1.1".	l
	"systemid": "3949a29d6b541a39f261567a93bc4190a4f41d48".	l
	"version": "6 50 1 15081"	l
1	Version . 0.50.1.15001	l
3		l
		l
	Submit request Upload file	
	The request was successfully processed	
	The license hinding was carried out successfully-	
	THE INCLUSE DITIONS WITH AND THEN OUT SUCCESSIONY	

Copy this ".join" file to the ixi-UMS Business server.

Restart the license tool, or close all windows until you see the start screen again.

Click "Add - Add License File" and select the "join file".

11.12 Certificates

When ixi-UMS Business with TLS-data encryption shall be used, the respective certificates must be deposited. Depending on the service (LDAP, SMTP, IMAP), different certificates are used or processed via different methods.

SMTP - Sending UMS-messages to the mail server

The certificate transmitted by the mail server is checked for validity by the <%PRODUCTNAME%> against the Windows certificate store "Trusted Root Certification Authorities".

LDAP - Query of the user data

The certificate must be imported in the Windows certificate storage under "local computer". The certificate required for the LDAP-connection and the **validity of the certificate are checked by Windows**.

The LDAP-servers stated in the ixi-UMS Business configuration for the LDAP-query must be stated just as in the certificate. In the Windows-domain environment, the FQDN must be stated.

With subordinate CA's, please take care that the certificate-chain can be resolved.

IMAP - Access to the mailbox

ixi-UMS Business offers IMAPS, but does not check whether the certificate from the mail server is valid.

12 Configuration of the PBX



Questionnaire for the Configuration of the PBX for the Operation of ixi-UMS Business

The settings in the PBX for the connection must fulfill the requirements for the wanted ixi-UMS features as described previously. The PBX should be configured completely before installing ixi-UMS Business. If the requirements are not fulfilled, the installation / configuration of ixi-UMS Business cannot be realized successfully and further costs may arise from this.

Please fill out the questionnaire in the following carefully after the PBX has been configured, and send it to the UMS support department.

Customer:	[Please fill out the fields]
Company:	
City:	
Partner/Rese	ller/AVP:

PBX: [Please fill out the fields]

Manufacturer:					
Name /Type :		Softwareversion / Rev.			
Connection Number / Connection Leading					
Technical Conta	Technical Contact / PBX Supervisor:				
name:		surname:			
Phone:		Fax:			
e-mail:					

Connection Type / Protocol Variant

[Please check where applicable]

DSS1	with	PMP	PP	
Qsig	with	ISO ISO	ECMA V1	ECMA V2
H.323	with	T.38	Softfa)	
SIP	with	T.38	Softfa)	

Remarks / Characteristics / Comments:

esto



Transmission of the Call Number

Please note down how the call numbers are transmitted to ixi-UMS Business (in the D-channel or with SIP or H.323). ixi-UMS Business configuration depends on the numbers, which are transmitted from / to the PBX.

Call Numbers in E.164-Format:

When all the call numbers are transferred in E.164 format (<country code><area code><call number>), further information requested at "Call Numbers Incoming" are not required.

Transmission in E.164:

only inbound	With inbound calls, all the call numbers are signaled to ixi-UMS in E.164-format: Recipient number (Called Party Number) Sender number (Calling Party Number) Redirection Number
only outbound	With outbound calls, ixi-UMS passes on the number to the CAPI in E.164 format: Recipient number (Called Party Number) Sender number (Calling Party Number)
inbound and outbound	All the call numbers are transmitted in E.164-format, as described above.

If the call numbers are only processed/transferred in one direction in E.164-format, further information requested at "Call Numbers Incoming" must be specified.

Call Numbers Outgoing:

With outgoing calls, the transmission of the sender call number from ixi-UMS Business to the PBX is required, allowed or not allowed, depending on the PBX.

Please check where applicable] and enter the sender call numbers here or define the respective number range with e.g. 1001 to 3999.

mandatory.	
not necessary, but allowed	
not allowed	

Call Numbers Incoming:

Please state whether and which number information (dependent on protokoll) the is transmitted from your PBX to the CAPI:

DSS1 - PMP

Example: A number dialed from the outside is "089 479942", the PBX, however, only transmits (on the bus to that ixi-UMS Business is connected) "42" in the D-channel. In this case, "42" and not "479942" must be noted down as MSN. Please note down the MSN's exactly the way they are transmitted to ixi-UMS Business:

Which MSN's are transmitted?		[Please fill out the field		
MSNs				



Qsig / DSS1 - PP

The overall number, which is transmitted from the PBX to the bus, to that ixi-UMS Business is transmitted, basically consists of two components:

Main number and extension digits. Please state whether and which number information is transmitted from your PBX to ixi-UMS Business.

Example: The number "089 479912345" is dialed from the outside.

- 089 the area code
- 4799 the number of the (Telekom-) connection, which leads to the PBX
- 12 the main number for the bus, at that ixi-UMS Business is connected (optional)
- 345 3 extension digits (from the part of ixi-UMS Business)

Transmitted Number Information?				[Please check where applicable or fill out the fields]		
Main Number	non	Number:		Number of Extension Digits:		

H.323 / SIP

With SIP or H.323, usually only the extension and maybe the main number is transmitted, too.

Example: The number "089 479912345" is dialed from the outside.

089 the area code

- 4799 the number of the (Telekom-) connection, which leads to the PBX
- 12 the main number for the bus, at that ixi-UMS Business is connected (optional)
- 345 3 extension digits (from the part of ixi-UMS Business)

Please state whether and which number information is transmitted from your PBX to ixi-UMS Business:

Transmitted Number Information?			[Please check where applicable or fill out the fields]		
Main Number	non	Number:		Number of Extension Digits:	

Who filled out this form?

First name:	Surname:	
Company:	Department/Position:	
E-mail:	Phone:	

The information stated above is correct.

Date:

Name / Signatur

13 Info 13.1 About estos



Estos GmbH, headquartered in Starnberg near Munich, Germany, is a leading manufacturer of software solutions with focus on unified communication with unified messaging and CTI (Computer Telephony Integration). The products of estos IXI-UMS support existing standards like standard interfaces and standard hardware; proprietary solutions are avoided. The company strives to provide its customers with future-oriented product development, with a focus on integration in available environments.

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For more information about estos and its products, please visit estos website.

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13.2 Version

Software: ixi-UMS 7 Business Version: 7.00 Manual: 9/29/2020