

ixi-UMS FAPI Connector

Installation & Configuration

Onlineversion

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1 Overview

ixi-UMS Enterprise provides its unified messaging features with Fax, Voice and SMS for various system environments. For the integration into third-party systems, ixi-UMS Enterprise among other things offers the ixi-UMS FAPI Connector.

In order to ensure the connection of the ixi-UMS FAPI Connector to the third-party system, the respective interfaces for the connection between the ixi-UMS FAPI Connector and the third-party system must be realized according to the specifications of the ixi-UMS FAPI Connector.

1.1 Features

The ixi-UMS FAPI Connector can be customized for the connection to the data source individually. The following customizations are possible:

- Fax text in ASCII- or HTML-format in the job file
- Multiple Instances possible
- Multiple recipients possible per message
- Attachments in every render-capable format (server-rendering)
- Multiple attachments
- Multiple fax jobs in one job file
- All the descriptions of the header fields arbitrary
- Processing of the message types Fax, SMS, Voice and TTS
- Header information in single lines or in one line one after another
- Reports to other ixi-UMS Enterprise Connector
- Processing of inbound messages

1.2 Requirements

- Windows 7/8/10 (32bit / 64bit)
- Windows Server 2008/2008R2 (32bit / 64bit),
- Windows Server 2012/2012R2
- Windows Server 2016/2019
- at least ixi-Framework 6.60
- at least ixi-UMS Kernel 6.50

1.3 Functionality

The job file is provided in the directory SPOOLOUT by the third-party application. This directory is periodically browsed by the ixi-UMS FAPI Connector for files that correspond with the [determined file filter](#). The data part can be passed on in the job file or as attachment. The ixi-UMS FAPI Connector converts the header part into ixi-UMS Enterprise format. In the process, not available yet required header information is extended with the [default information](#).

Example:

Header passed on to the ixi-UMS FAPI Connector:

```
@ @RECIPIENT:+49 8142 47989798
@ @RECIPIENT:+49 30 798946
@ @SENDER:meier@firma.de
@ @PRIORITY:2
@ @COVER:
@ @ATTACHMENT:f:\attachments\welcome.doc;0
@ @SENDER_DDI:789
```

Header like passed on to the subsequent ixi-UMS Enterprise component by the ixi-UMS FAPI Connector:

```
MAIL FROM:meier@firma.de
RCPT TO:fax#+49 8142 47989798
RCPT TO:fax#+49 30 798946
Importance:normal
X-IFAXDATA-HeaderFile:
X-IFAXDATA-FaxEnabled:1
X-IFAXDATA-FaxLocal:1
X-IFAXDATA-FaxCountryWide:0
X-IFAXDATA-FaxInternational:0
X-IFAXDATA-Department:
X-IFAXDATA-DChID:789
X-IFAXDATA-SenderID:
X-MaxPages:
X-COVERINFO-Businessphone1:
X-COVERINFO-BusinessFax:
X-COVERINFO-Company:
X-COVERINFO-Address:
X-COVERINFO-Department:
```

If one of the "Must"-fields is not available or if the conversion cannot be executed successfully, the job is classified as error job and is provided in the subdirectory ERROR together with an error report.

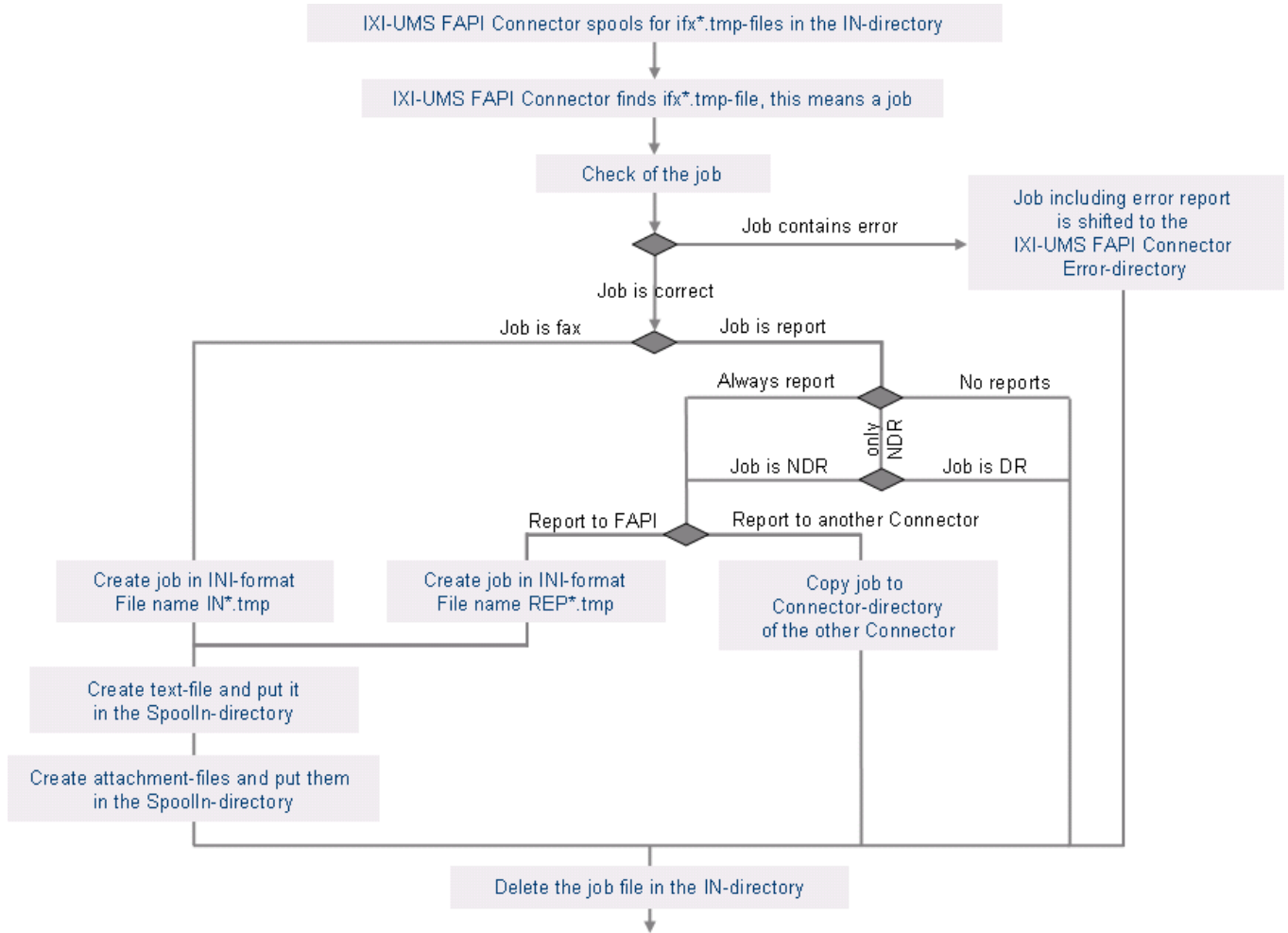
The data part of the fax message can be passed on as attachment or in the job file as ASCII-text or HTML-format. The data part is embedded in Mime-format.

When multiple messages are stated in one job file, an individual outbound message file is generated for every job.

After that, the file is passed on to the ixi-UMS Render Connector and processed.

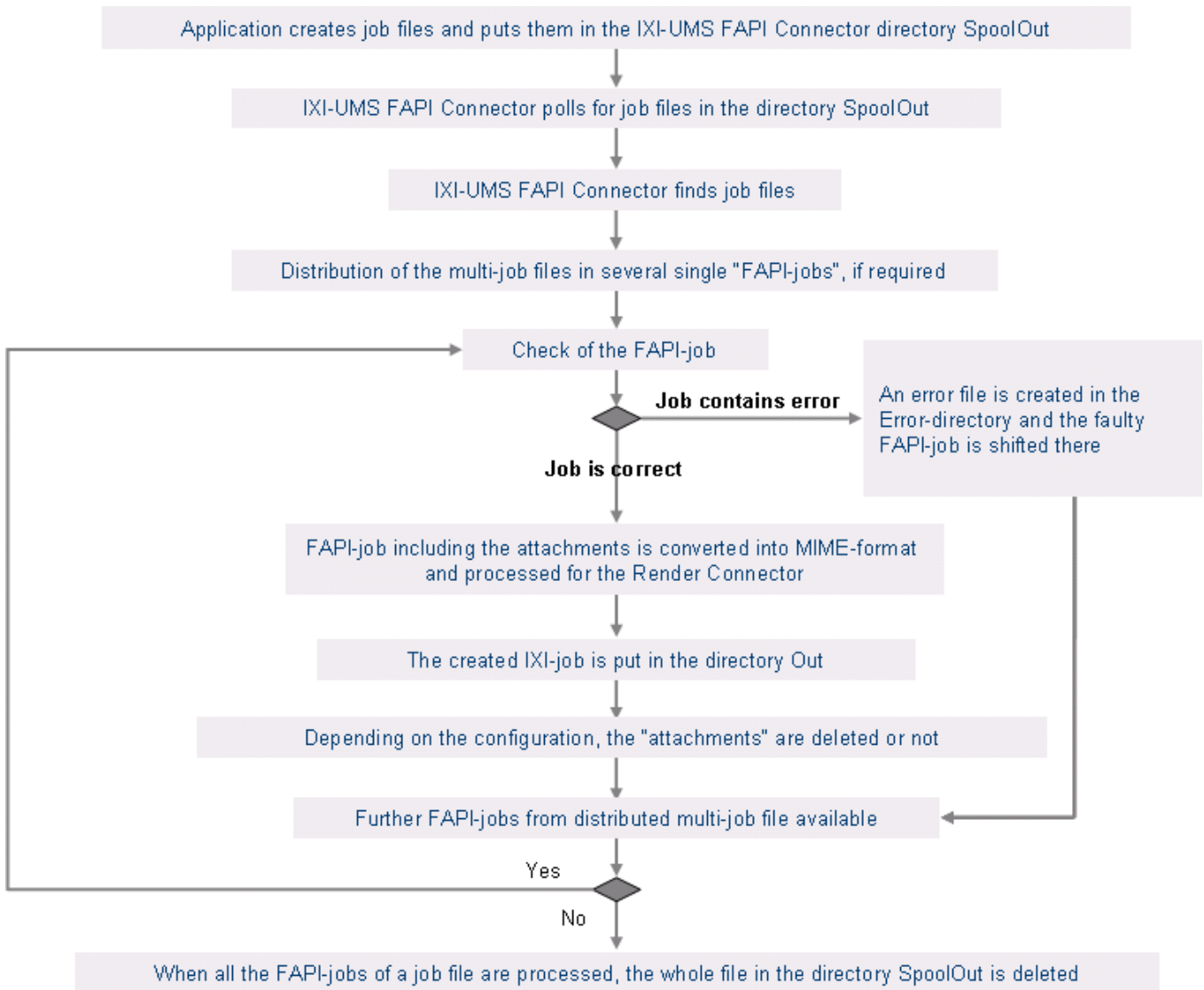
1.4 Process Inbound

The process for inbound messages and reports is portrayed in the following.



1.5 Process Outbound

The process for outbound messages is portrayed in the following.



For information about the required format of a job file, please refer to the respective articles at "How To".

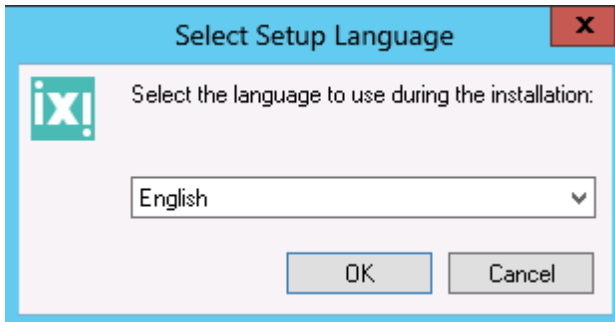
1.6 Licensing

The license for the ixi-UMS FAPI Connector is controlled via the license key of the ixi-UMS Kernel. You can request a demo license at: lizenz-ums@estos.de.

2 Installation

1. Remove/uninstall all previous versions of the ixi-UMS FAPI Connector or ixi-UMS FATxt Connector
2. Log in with the ixi-UMS Enterprise Administrator Account
3. Install the ixi-UMS Enterprise
4. Install the ixi-Framework 6.60
5. Install the ixi-UMS Kernel (optional; can also be installed on separate machine)
6. Install the ixi-UMS FAPI Connector

2.1 Language

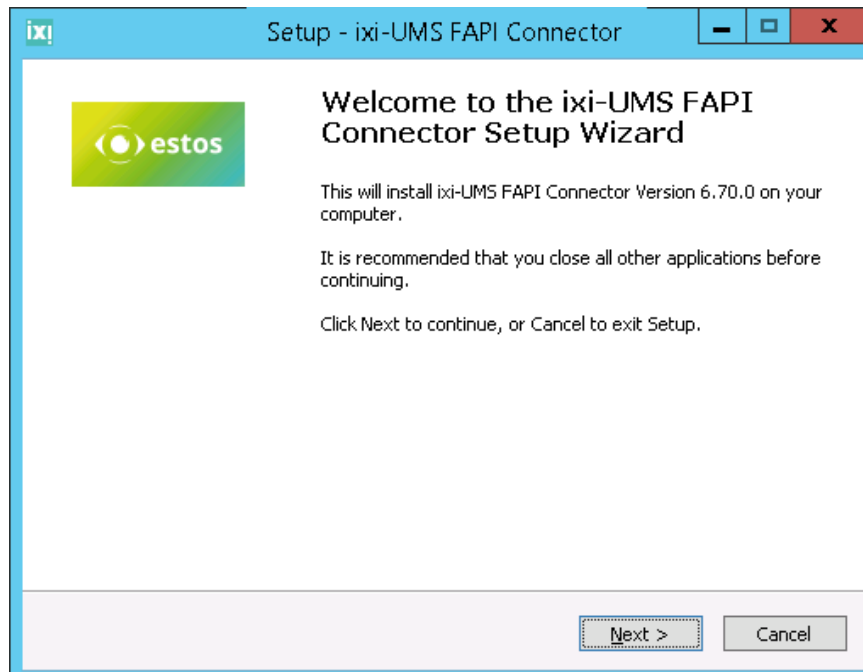


The setup of the ixi-UMS FAPI Connector can be executed in the languages German and English.

The language of the setup does not determine the language of the MMC-SnapIn. This was determined by the first ixi-UMS Enterprise component installed and can be changed as described at HowTo.

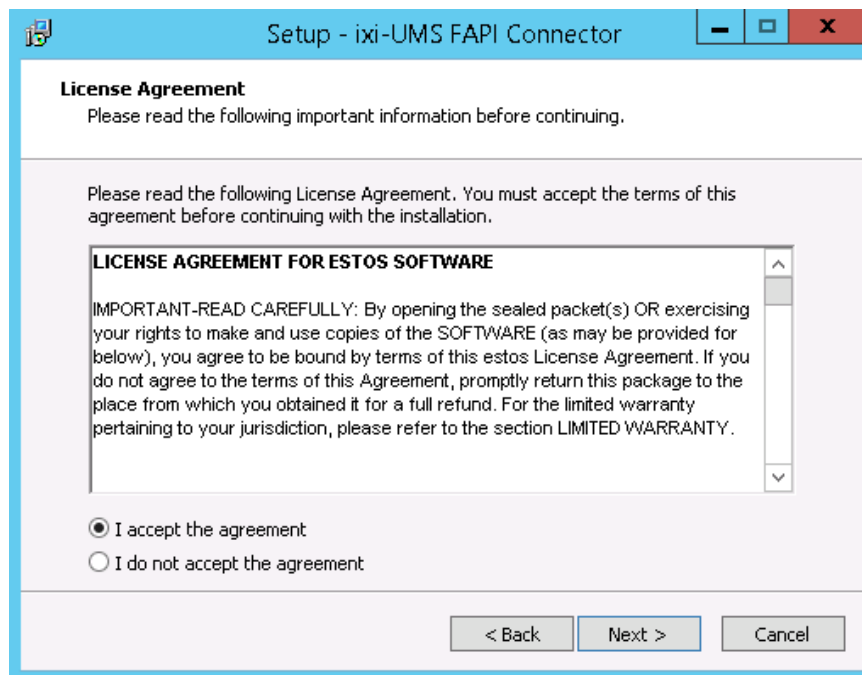
2.2 Welcome

After having determined the language, the installation is started.



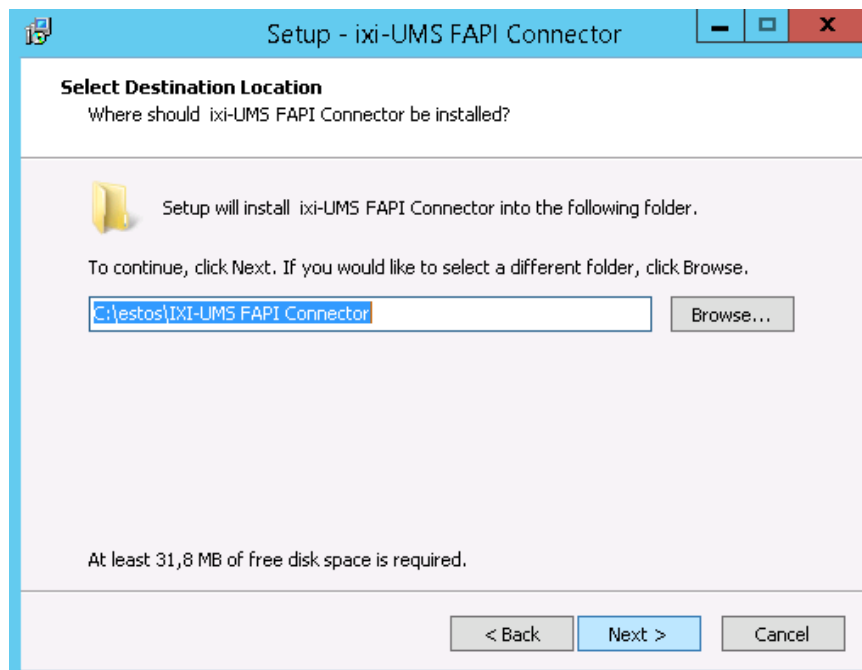
2.3 License Agreement

The end user's licence agreement is indicated. Peruse this carefully and choose "I accept..." Only then the installation can be continued.



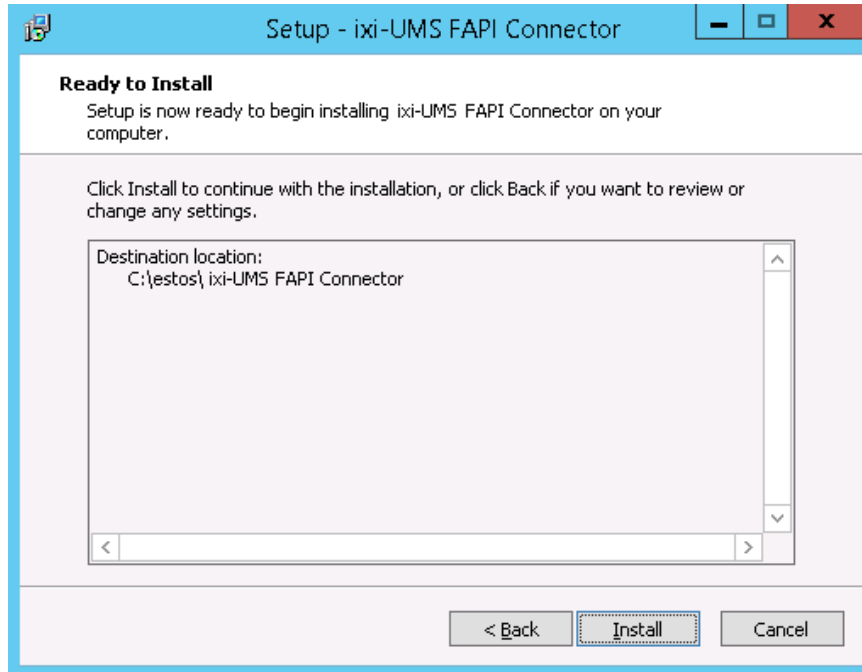
2.4 Destination Location

After that, you have to determine the installation path. The default path is a path on the directory level of the ixi-Framework installed beforehand.



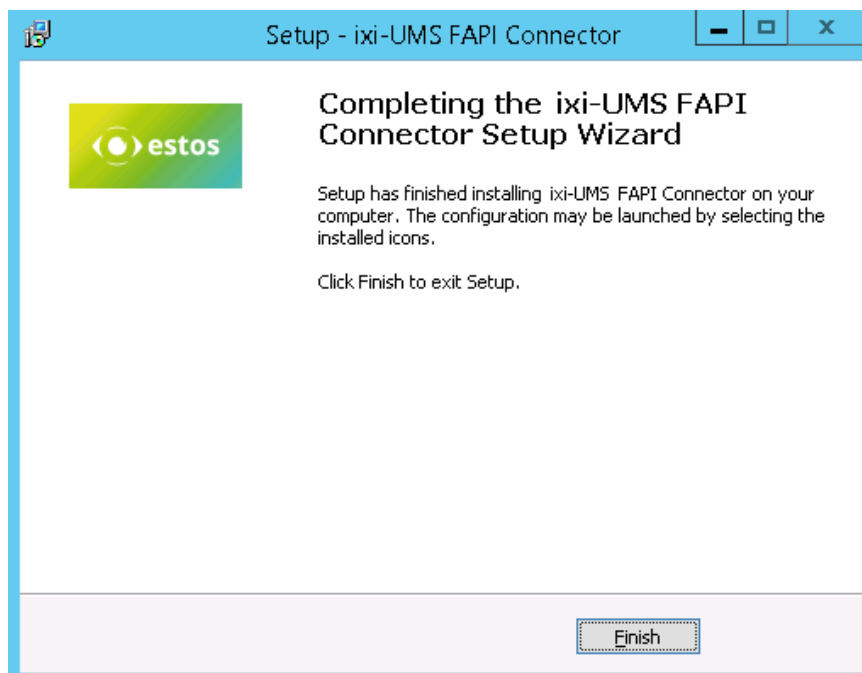
2.5 Installation

Before the copying is started, another summary is displayed.



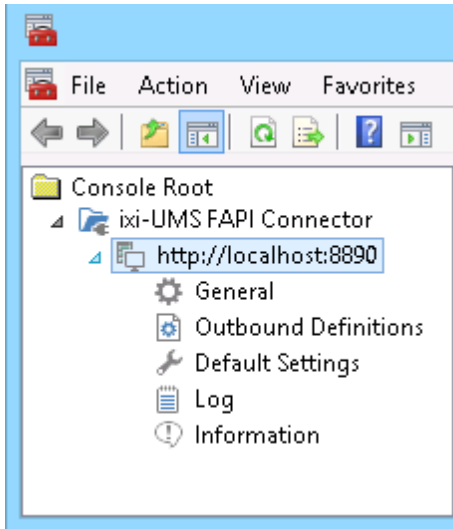
2.6 Finish

In order to finish the installation, please click on "Finish".



3 ixi-UMS FAPI Connector Management

During the installation, the required SnapIn is registered on the machine automatically. The SnapIn - like any other SnapIn - can be added to an MMC.



If the SnapIn shall also be available on other machines, the "FAPIMgmtSnapIn.dll" must be registered with "regsvr32" on the respective machine.

All the required files are deposited in the folder "..\ixi-UMS FAPI Connector \Management". The folder should be copied to the respective machine completely.

Via right-click on "ixi-UMS FAPI Connector" and "Add", other ixi-UMS FAPI Connectors from version 6.0 on installed in the network can be added to the console and therewith also be configured.

Changing the language of the SnapIn

It is explained at How To "Changing MMC Language" how the language of the SnapIn can be changed after the installation.

3.1 General

At "General", the general mode of operation is determined and the instances, directories and the characteristics for the reports are defined.

3.1.1 ID and Instances

If several ixi-UMS FAPI Connectors are in parallel operation and if they pick up the files from the same directories, an individual ID must be assigned to every Connector.

The "Compatibility mode" must be enabled when files shall be processed that had been set up for the old "ixi-UMS FAPI Connector 1.2".



The ixi-UMS Enterprise Support recommends to adjust the format of the files when creating them. If this is not possible, the "compatibility mode" is enabled. Only files in the old format can be processed then!

The Connector-directory is stated from the installed ixi-UMS Kernel or with the installation. In this directory, all the required ixi-UMS FAPI Connector directories for the file transfer are set up.

If it shall be possible to send files from different systems, further instances must be set up. Every instance must be given a unique directory name.

All the required directories are automatically set up in the Connector main directory stated above. The directory paths can be [stated / changed for every instance separately](#).

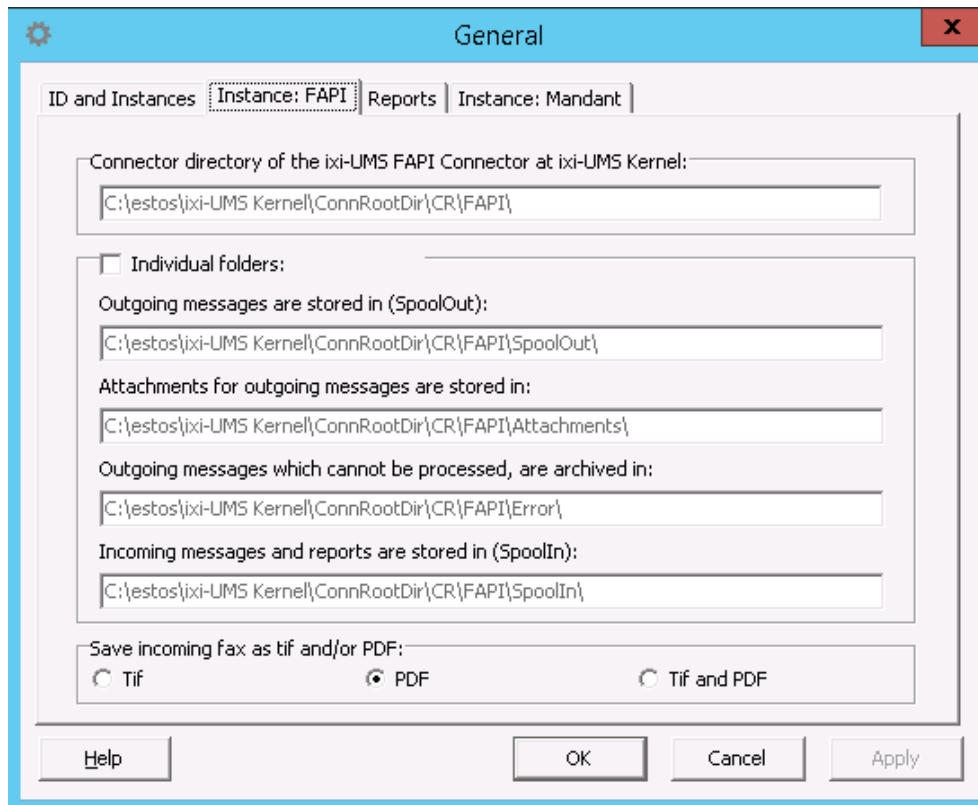
Maximum 4 instances are possible.

3.1.2 Directories

By default, all the required directories are set up in the "Connector Root Directory" of the ixi-UMS Kernel. If the ixi-UMS FAPI Connector has been installed on another machine, this directory was stated during the installation and can be changed here.

The directories in that the job files of the connected system are deposited, inbound messages are picked up and the faulty jobs are deposited, can be stated individually.

For the instances 2 to 4, separate tabs for the directories (named Instance:<name>) are set up with the creation of the instance.





From ixi-UMS Enterprise Version 6.60, can be set for each instance if the ixi-UMS faxes delivered in TIF and/or PDF format. Pretension is the corresponding setting in the ixi-UMS Render Connector under "Incoming Messages". If only the "local message store" is used, this setting is not relevant.

Please note that the service account of the ixi-UMS FAPI Connector needs full access to these directories.

Outgoing files **that could not be processed** by the ixi-UMS FAPI Connector are shifted to the **"Error"-directory**.

For this files note:

-  **No further reports** are created, **when** is has been determined at "**Reports**", that the **reports shall be returned to the ixi-UMS FAPI Connector**. In this case, the directory must be monitored.
-  If the **reports are sent to another ixi-UMS Enterprise Connector**, an **additional report** is generated and sent to the other ixi-UMS Connector. The recipient then is the original sender of the message.

For more informationen please read: How To: Reports and Error-Messages

3.1.3 Reports

Here it can be determined whether and how the reports generated by the ixi-UMS Kernel are dealt with. The settings are valid for all the the instances.

Always generate Reports

All the reports generated by the ixi-UMS Kernel are processed. According to the settings, the reports are passed on to another ixi-UMS Enterprise Connector or are deposited in the "SpoolIn"-directory.

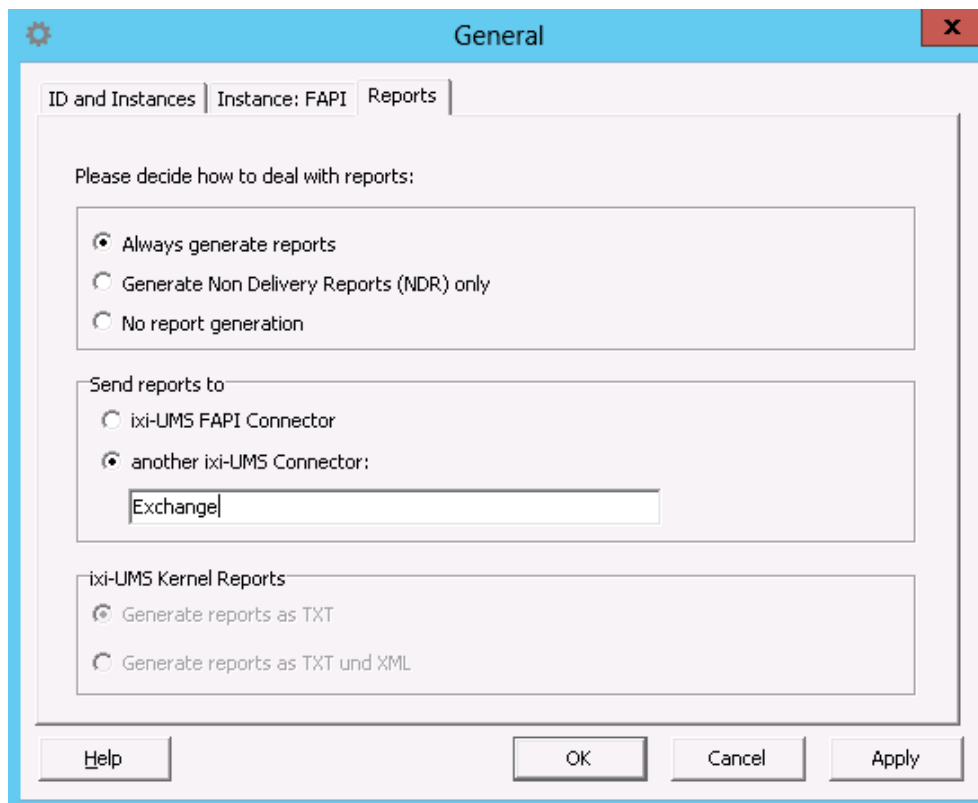
Generate Non Delivery Reports (NDR) Only

Only the Non Delivery Reports (NDR) generated by the ixi-UMS Kernel are processed. According to the settings, the reports are passed on to another ixi-UMS Enterprise Connector or are deposited in the "SpoolIn"-directory.

No Report generation

The reports generated by the ixi-UMS Kernel are deleted.

Error messages from ixi-UMS Render Connector und ixi-UMS FAPI Connector are created in the [Error-folder](#) only



If reports are generated, they can be dealt with as in the following:

Send reports to

• **ixi-UMS FAPI Connector**

The reports are deposited in the "SpoolIn"-folder at "[Directories](#)". A report with the file description REP<original files name> is generated per outbound message and is stored in the folder.

With positive reports, a <original file name>.txt messages is created along with the report.

When the report contains an attachment (default with negative reports (NDR)), this is created as file in addition.

For information about content and format of the reports, please refer "How To - Inbound Files".

- **another ixi-UMS Enterprise Connector:**

The reports created by the ixi-UMS Kernel and ixi-UMS Render Connector are passed on to another ixi-UMS Enterprise Connector by the ixi-UMS FAPI Connector.

By this, reports can be directed to a messaging system, for example. The name of an available Connector-directory has to be stated.



With several instances, the reports from all the instances are passed on to the stated Connector.

For more informations and options please read: How To: Reports and Error-Messages

ixi-UMS Kernel Reports

In connection with the ixi-UMS Kernel 6.30 or higher the ixi-UMS Kernel can create reports for sending and incoming messages in addition, as XML-string. For more information please read ixi-UMS Kernel Manual.

It must be determined, if the **reports as a TXT file** or as a **TXT file and XML file** should generate by the ixi-UMS FAPI Connector.

3.2 Outbound Definitions

Here all the definitions and information for the outbound job files must be entered.

The header fields and the format information of the outbound files must be defined.



If the ixi-UMS FAPI Connector is set up for the compatibility mode, NO changes can be made.

It can only be determined at "[Format](#)" whether attachments shall be deleted.

3.2.1 Format

At **General**, the details to the characters must be determined, which may appear in the header or in the job file.

Value	Description	Default
File filter	Defines the convention for the naming of outbound jobs. Example: out*.tmp; the job file then e.g. must be named: Out687897654.tmp	*.tmp
Processing of the attachments	It has to be determined whether the attachments shall be deleted by default. See also How To:"Format of the Job File"	Yes
Prefix	Value that must be put in front of a header field or command	@@
Separator	Separator between name and value of the job header fields	:
Time interval	polling Interval for time-delayed jobs in minutes	10

At **Body text** it has to be determined, in which format the bodytext is transferred. If plain text is used, further details concerning format and coding must be configured.

Value	Description	Default
Format of the body text	HTML or PLAIN For the type "PLAIN", additional subsequent settings must be made	PLAIN
Character set	Character set that shall be used for the conversion, e.g. ISO-8859-15, UTF-8	ISO-8859-15
Encoding	Possible values: 8bit, Base64, Quoted-printable	8bit
Number of lines per page	Number of lines per page; depending on the font and the type size stated in the coverpage (fax.htm)	

For details about the formatting, please have a look at "How To - Formattings".

3.2.2 Header

In this dialogue, the assignment of the ixi-UMS Enterprise commands to the commands in the job file is made. All the assignments must be available, also if they are not transferred in the job file.

Remark:

For further information about the format of a job file, please refer to "How To - Format of a Job File".

The screenshot shows the 'Outbound Definitions' dialog box with the 'Header' tab selected. The dialog has a title bar with a yellow icon, a minus sign, a maximize button, and a close button. Below the title bar are three tabs: 'Format', 'Header', and 'Coverpage'. The 'Header' tab contains a section titled 'Names of the job header fields (all fields are required)'. This section contains two columns of fields, each with a label, a '@@' symbol, and a text input field. The fields are: Recipient: @@ RECIPIENT, Priority: @@ PRIORITY, Sender: @@ SENDER, D-Channel-ID: @@ DCHID, Sender DDI: @@ SENDER_DDI, Message ID: @@ MSGID, Subject: @@ SUBJECT, Content type: @@ CONTENT-TYPE, Address type: @@ ADDRTYPE, Character set: @@ CHARSET, Coverpage: @@ COVER, Encoding: @@ ENCODING, Attachment: @@ ATTACHMENT, SendTime: @@ SENDTIME. Below this section is a 'Job commands' section with two fields: Page break: @@ FF and End of job: @@ JOBEND. At the bottom of the dialog are four buttons: Help, OK, Cancel, and Apply.

Field Name	Symbol	Value
Recipient:	@@	RECIPIENT
Priority:	@@	PRIORITY
Sender:	@@	SENDER
D-Channel-ID:	@@	DCHID
Sender DDI:	@@	SENDER_DDI
Message ID:	@@	MSGID
Subject:	@@	SUBJECT
Content type:	@@	CONTENT-TYPE
Address type:	@@	ADDRTYPE
Character set:	@@	CHARSET
Coverpage:	@@	COVER
Encoding:	@@	ENCODING
Attachment:	@@	ATTACHMENT
SendTime:	@@	SENDTIME

Field Name	Symbol	Value
Page break:	@@	FF
End of job:	@@	JOBEND

Header Field	Default	Value	Description
Recipient:	RECIPIENT	Numeric and +, fax#, sms#, voc#, #tts	Recipient number (several possible per header) If this information is not defined in the header, the job is copied to the Error-directory
Sender:	SENDER	Alphanumeric as well as @ and .	Sender; as e-mail address or complete phone number
Sender DDI:	SENDER_DDI:	Numeric	Sender extension; is attached to the sender number of the ixi-UMS Kernel
Subject:	SUBJECT	All characters	Subject; is transmitted together with the report
Address type:	ADDRTYPE	Numeric; Fax, SMS, Voc	Information about the type of message (Fax, Voice or SMS). If the address type is transferred with the recipient, this is used.
Coverpage:	COVER	Alphanumeric	Information about the folder in the ixi-UMS Render Connector, in which the coverpage to be used is deposited
Attachment:	ATTACHMENT	Alphanumeric	Several possible per header Additional file as attachment. If another path than the default Attachment-Path is stated in this field, this one is used. Otherwise it is presumed, that the file lies in the attachment-directory stated at "Directory Information". Further information at "How To - Format of a Job File".
Priority:	PRIORITY	Numeric	Fax priority for the sending at the ixi-UMS Enterprise Server: 0=Low; 1=Normal; 2=High
D-Channel-ID:	DCHID	Numeric	Value transmitted in the D-channel, e.g. for the measuring and billing
Message ID:	MSGID:	Alphanumeric	Transmitted with the sending report
Content type:	CONTENT-TYPE	Alphanumeric	See "How To - Format of a Job File".
Charset:	CHARSET		
Encoding:	ENCODING		
Sendtime	SENDTIME	Numeric	See "How To - Time-delayed sending"

With the Job commands, pagebreak and job end are determined.

Pagebreak:	With PLAIN-text, a pagebreak can be forced, e.g. @@FF	FF
Job end:	Ends a message. Therewith, several messages can be transferred in one job file.	JOBEND

3.2.3 Coveragepage

The information transferred in the header fields determined here are exclusively analyzed with the creation of a coveragepage. All the assignments must be available even if they are not transferred in the job file. All the other fields that are not contained in the job file are added by the ixi-UMS FAPI Connector and are filled with the [default values](#), if necessary.

The screenshot shows the 'Outbound Definitions' dialog box with the 'Coveragepage' tab selected. The dialog has three tabs: 'Format', 'Header', and 'Coveragepage'. The main area is titled 'Names of the coveragepage header fields (all fields are required)'. It contains two columns of fields, each with a label, a '@@' symbol, and a text input box. The first column includes: Company: @@ COMPANY, Street: @@ STREET, Postal code: @@ POSTALCODE, Location: @@ LOCATION, and Address (deprecated): @@ ADDRESS. The second column includes: Business phone: @@ BUSINESSPHONE1, Business fax: @@ BUSINESSFAX, Department: @@ DEPARTMENT, Office: @@ OFFICE, Custom 1: @@ CUSTOM1, Custom 2: @@ CUSTOM2, and Custom 3: @@ CUSTOM3. Below this section is a 'Hint: Coveragepage information will only be evaluated if a coveragepage is generated.' At the bottom of the main area is a section titled 'Name of the fax headline field:' with a label 'Fax headline: @@ HEADLINE'. The dialog has 'Help', 'OK', 'Cancel', and 'Apply' buttons at the bottom.

For further information about the topic "Coveragepage" as well as the assignment of the variables, please refer to the manual of the ixi-UMS Render Connector (ixi-UMS Kernel Manual) - HowTo.

From version 6.0 on, an **individual fax headline** can be entered. When a headline is entered in the header, it overwrites the sender-ID entered in the ixi-UMS Kernel at "Hardware - Fax".

3.3 Default Specifications

Here you can deposit values for some of the header fields, which are entered in the outbound message if the field is not available in the job or no value is transferred.


3.3.1 Permissions and Specifications

All the information in the following are only entered in the job if the respective value is not available in the job file. Please note that the permissions represent an exception. They can only be determined globally in the ixi-UMS FAPI Connector and cannot be transferred per job individually.

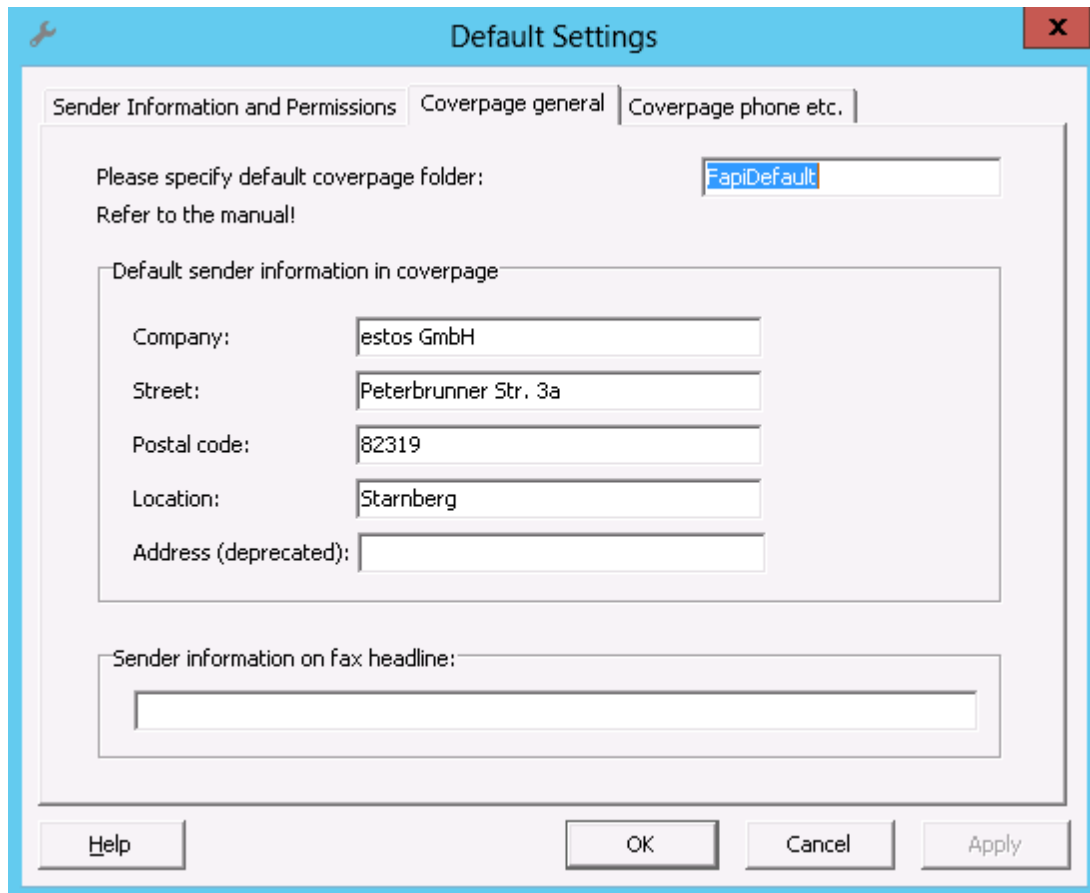
Message is sent as:	If no address type is stated in the job file, the message is processed in the type stated here. If the address type is transferred with the recipient, this is used.
Sender:	If no sender is stated in the job file, the information deposited here is entered. A valid e-mail address or an UMS-number valid in the ixi-UMS Enterprise system is mandatory here.
Fax sender number:	If no sender information is transferred in the job file, the number deposited here is entered.
ISDN Sender Address:	The number is displayed as D-channel information. A global entry for example may make sense when all the messages (sender) shall be charged via the same D-channel number in the PBX.

3.3.2 Coveragepage general

Enter a folder for the coveragepage valid for all the outbound messages, which is used when no value has been transferred in the job file. See also the How To: "Coveragepage for Fax Messages in TXT-Format".

-  When the feature "Coveragepage Recipient Assignment" (see ixi-UMS Kernel Manual) shall be used, the respective faxrcpt.htm must be deposited in the directory

Values that are inserted dynamically per fax on the used coveragepage can be transferred to the ixi-UMS Enterprise Coveragepage. Provided that no values for the coveragepage are entered in the job file, the default values stated here are used.



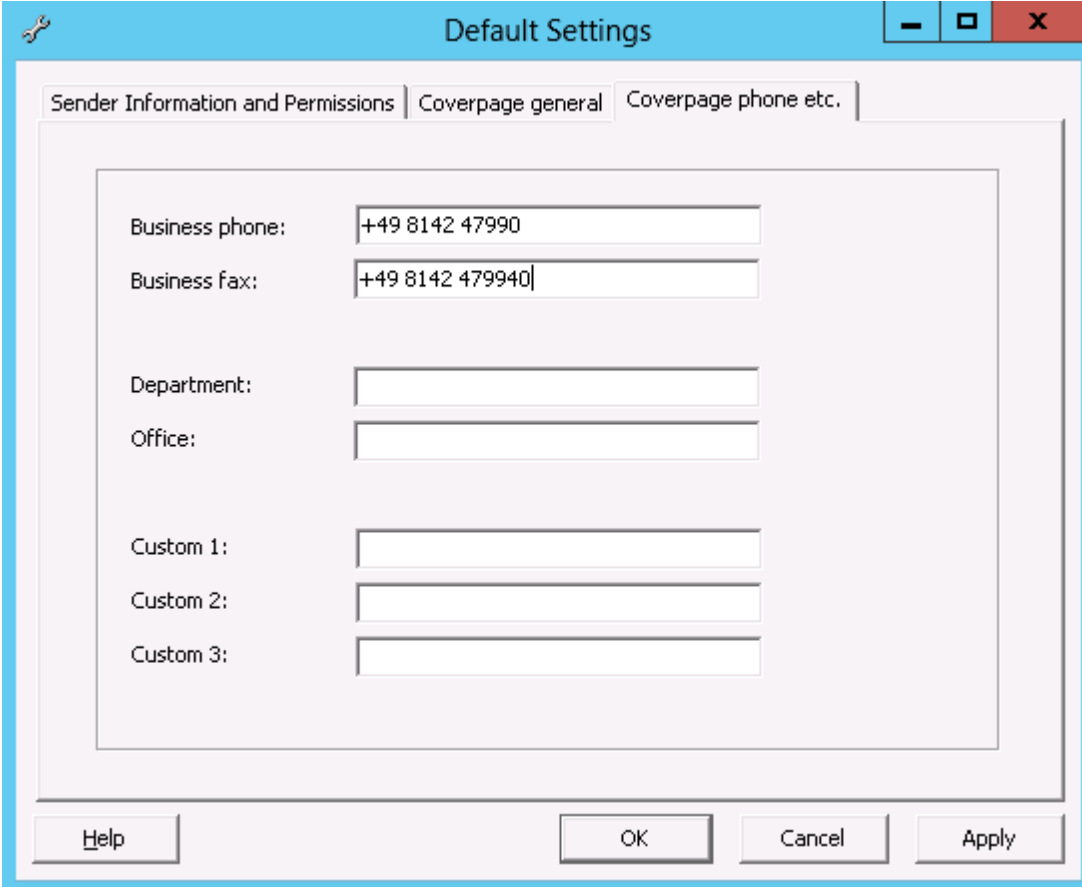
The screenshot shows a dialog box titled "Default Settings" with a blue header bar. It has three tabs: "Sender Information and Permissions", "Coveragepage general" (which is selected), and "Coveragepage phone etc.". The "Coveragepage general" tab contains the following fields:

- "Please specify default coveragepage folder:" with a text input field containing "FapiDefault".
- "Refer to the manual!"
- "Default sender information in coveragepage" section with the following fields:
 - "Company:" with input "estos GmbH"
 - "Street:" with input "Peterbrunner Str. 3a"
 - "Postal code:" with input "82319"
 - "Location:" with input "Starnberg"
 - "Address (deprecated):" with an empty input field
- "Sender information on fax headline:" with an empty text area.

At the bottom of the dialog are four buttons: "Help", "OK", "Cancel", and "Apply".

3.3.3 Deckblatt phone etc.

Values that are inserted dynamically per fax on the used coveragepage can be transferred to the ixi-UMS Enterprise Coveragepage. Provided that no values for the coveragepage are entered in the job file, the default values stated here are used.



The screenshot shows a Windows-style dialog box titled "Default Settings" with a blue header bar. It has three tabs: "Sender Information and Permissions", "Coverpage general", and "Coverpage phone etc.". The "Coverpage phone etc." tab is selected. Inside the dialog, there are several input fields:

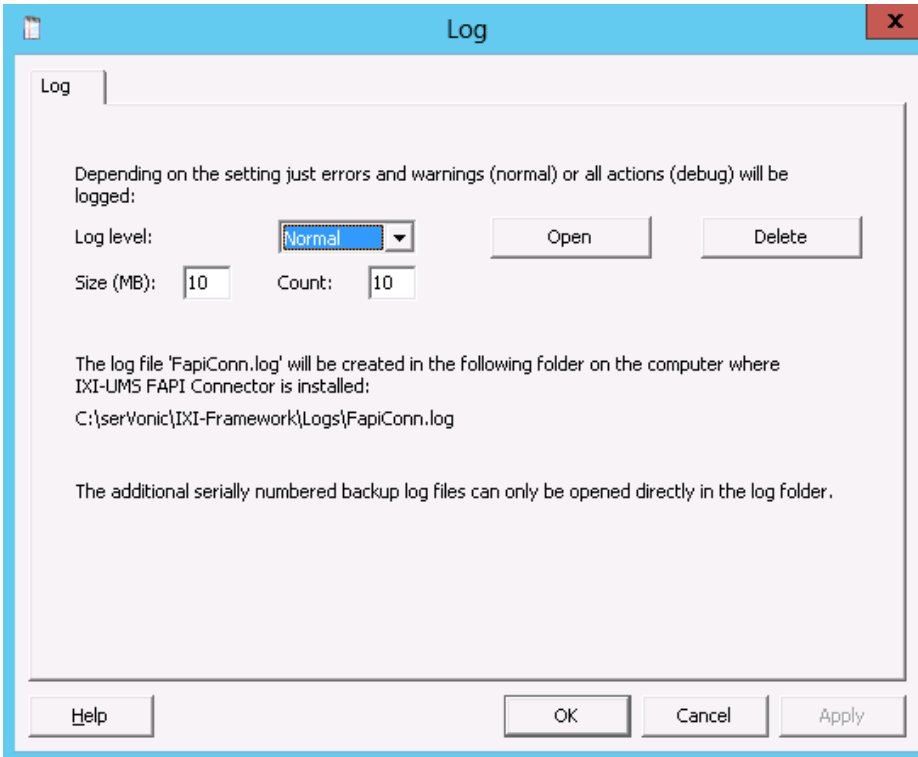
- "Business phone:" with the value "+49 8142 47990"
- "Business fax:" with the value "+49 8142 479940"
- "Department:" (empty)
- "Office:" (empty)
- "Custom 1:" (empty)
- "Custom 2:" (empty)
- "Custom 3:" (empty)

At the bottom of the dialog, there are four buttons: "Help", "OK", "Cancel", and "Apply".

In order to display additional information on the coveragepage, the fields stated here are available to you. For the coveragepage, the variables for department and office as well as 3 additional fields are available.

3.4 Log

A logfile can be activated here for troubleshooting.



None

No logfile will be write

Normal

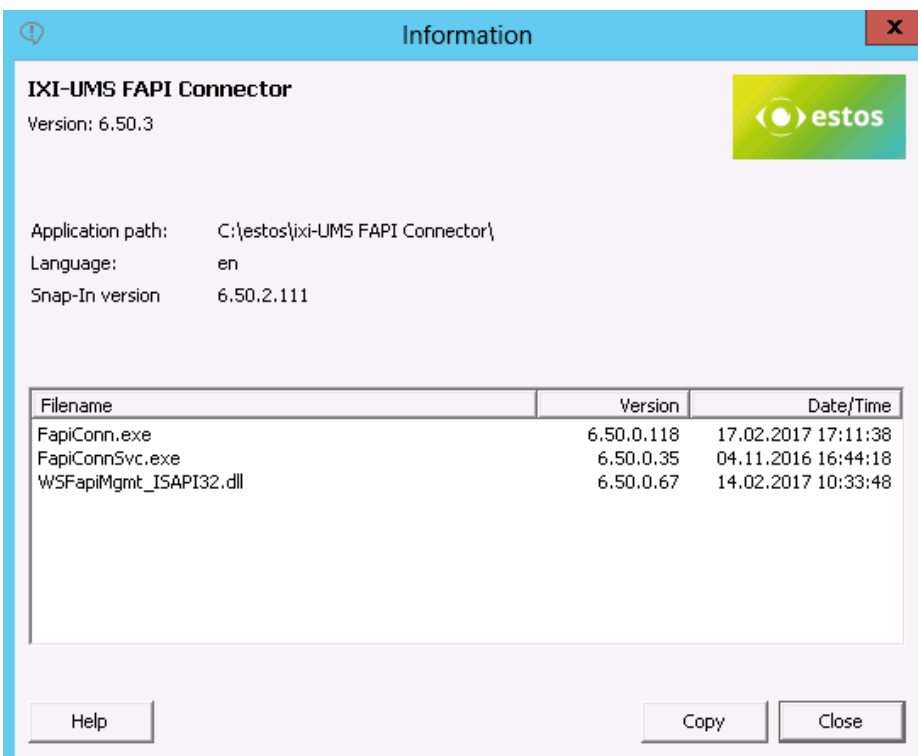
only errors and warnings are logged.

Debug

All processes are logged. Please take into account, that the files get very big very soon in the debug-mode. The log level should be set to "Debug" for debugging only, not steadily.

The log file "FapiConn.log" is stored in the directory "... \ixi-Framework\Logs" where it can be opened with "Notepad".

3.5 Information



Info is intended to give you some information about the connector version installed and the current file versions used.

4 Info

4.1 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 Enterprise 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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4.2 Version

Software: ixi-UMS FAPI Connector
Version: 6.70
Manual: 01.05.2019