Voice Pro®
Enterprise 4.0

Manual

Speech Recognition

Voice Pro Enterprise 4.0 Client

(Windows based Client)

MANUAL

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1.   Welcome to Voice Pro Enterprise 4.0 Client

Voice Pro Enterprise 4.0 is the secure speech recognition solution for enterprises. Voice Pro Enterprise 4.0 provides professional dictation and transcription tools for the conversion of spoken language into written language.
For the first time Voice Pro Enterprise 4.0 uses the technology of neural networks, a special area of artificial intelligence. This enables speaker-independent recognition at the highest standard.
There is no need for time intensive speaker trainings anymore.
The new generation of our speaker independent speech recognition assists you significantly in carrying out your daily dictation tasks, saves your time and helps you to make you more productive.
With Voice Pro Enterprise 4.0, you can write as fast as you speak. On average, you will write three times faster than you type. The high recognition accuracy minimizes the postprocessing tasks.

Efficient speech recognition:
In your client software, you can either dictate directly via microphone or headset or you can upload your recorded dictations and let them convert reliably and efficiently into text. The recognized text can be edited and be used comfortably.

Huge language dictionaries and professional subject areas (Legal and Medical):
The huge language dictionary with 1 million words already covers almost all subjects.

Depending on your license, specialized vocabularies covering the fields of law and medicine can be activated.

High recognition accuracy:
Completely revised language models and vocabularies ensure high recognition accuracy.

Individual adaptability:
Voice Pro Enterprise 4.0 adapts to individual speaking habits. You can add unknown words to the dictionary; recurring texts can be defined as text blocks. Just use the command, e.g. "default signature", and the whole text block will be inserted. In the abbreviation list you can find the common abbreviations – depending on the chosen subject area and the licensed language. According to your needs it can be adapted, activated or deactivated, entries can be added or deleted. You can also add substitutions. Thus you can achieve exactly the desired results in your next dictations.

Support of different workflows:
You can use Voice Pro Enterprise 4.0 for to dictate in almost real time or to let recorded dictations be transcribed.
In addition to the recognized text also the dictation remains as it is saved as audio file. It can be played time synchronously to the text. This helps to simplify the final or subsequent review (by the user or the secretary).

2.   Installation and first steps

This chapter contains important information you should consider while installation and before using the speech recognition Voice Pro Enterprise 4.0.

2.1. Installation

You obtain from Linguatec an e-mail with a link, via which you can download the software Voice Pro Enterprise 4.0 Client on your Windows-PC.

In the same e-mail you will find your login data.

Keep them in a safe place, as you need them each time when you start the Voice Pro Enterprise 4.0 Client.

Before you can use the speech recognition, you need to download the installation file for Voice Pro Enterprise 4.0 Client (the link you can find in the same e-mail of Linguatec with which you obtained your login data) and install it on your Windows PC. The installation needs administrative rights.

With the Voice Pro Enterprise 4.0 Client application, you can either dictate directly via microphone or transcribe existing audio recordings. The recordings are transmitted to Voice Pro Enterprise 4.0, processed and converted into text.
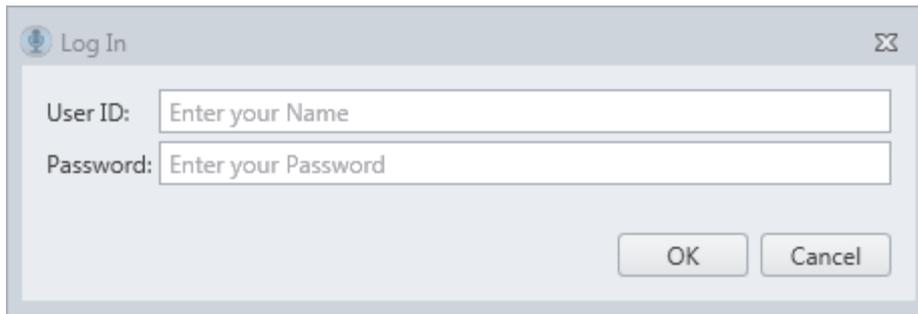
Attention: neither your audio files nor the transcribed text will be stored on the server. Therefore please backup your audio and text files on your PC using the available save functions in Voice Pro Enterprise 4.0 Client.

2.2. Starting the client

To start the speech recognition, please click onto the desktop icon of Voice Pro Enterprise 4.0 Client.
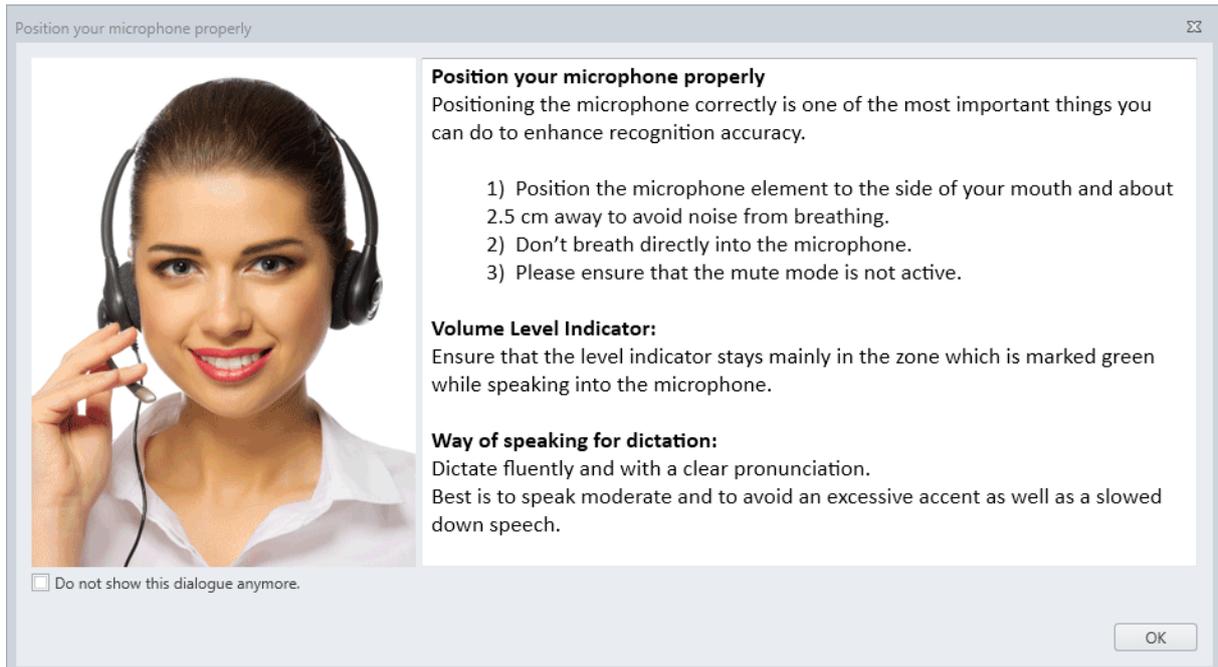

Please enter your User ID and your password and confirm with OK.

Please note how to position your microphone properly and proceed as follows:

If you wish that these information will not be shown in future anymore, please activate the option: „Do not show this dialogue anymore."
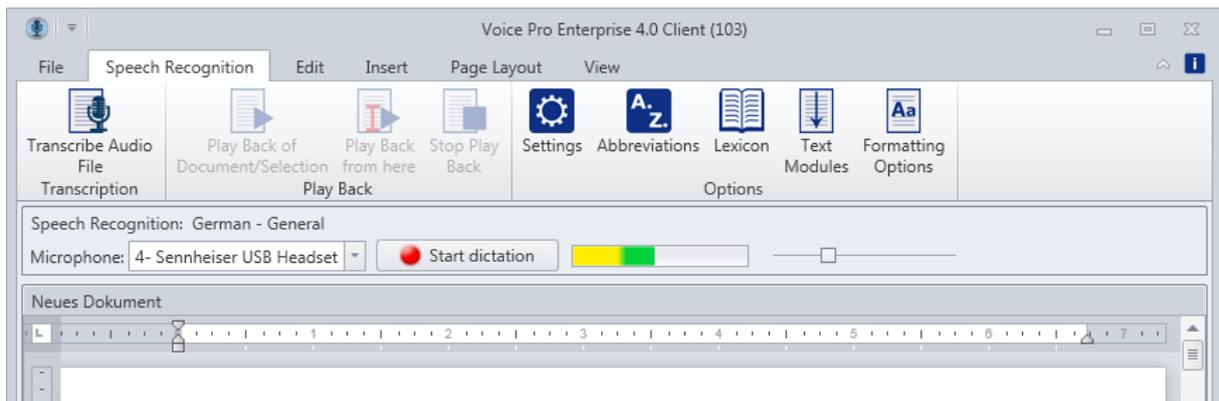
2.3. Before Dictation

Before starting the dictation please check the following issues:

Microphone connection:
Please connect a suitable microphone for the speech recognition.

Microphone selection:
Please ensure that on the tab **Speech Recognition** in the text field **Microphone** the appropriate microphone is selected.

Does a sound level appear in the right field when you speak into the microphone (without starting the recording)?

All connected recording devices are listed in the dropdown menu. Just in case that you want to change the selection.
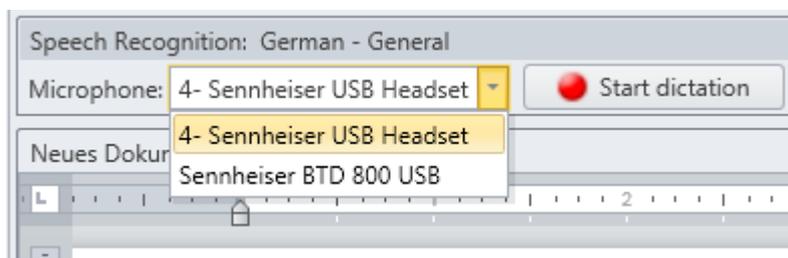
Microphone setting and background noise:
Please ensure that the level indicator (right of the red dictate button) is responding while speaking into the microphone and stays mainly in the zone which is marked in green color

If the level indicator reaches the red zone, the recording is overmodulated. If the level indicator stays only in the yellow zone the recording is undermodulated. Adjust the level by moving the slide control.
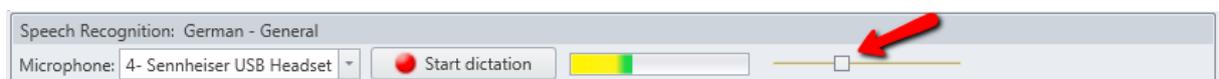
A move to the left reduces the level to avoid overmodulation, a move to the right increases the level to avoid undermodulation.

Please take care that the dictation surrounding is as quiet as possible.

E.g. close the window to keep out traffic noise. Background noises can have a negative effect on the recognition quality.

Is the microphone turned on?
If your used headset or microphone is providing an on/off switch, please turn it to „on".
Ensure that the mute mode is turned off.

Tips concerning pronunciation and the way of speaking:
While dictating please have in mind a clear and articulated pronunciation, best is to speak moderate and to avoid an excessive accent as well as a slowed down speech.

Please dictate fluently and natural.

Remember to dictate punctuation marks.

For example: "How do you do QUESTION MARK"

A list of all supported Voice Pro Enterprise 4.0 voice commands you can find in chapter 6.

Besides to the direct dictation Voice Pro Enterprise 4.0 Client supports also the transcription of audio files. Therefore, an audio file needs to be uploaded to the server. There the recognition will take place. Then the recognized text will be displayed in the text field.

2.4. Before Recognition of Audio Files

Before the upload of an audio file the following items need to be checked:

Audio file format:
Please ensure that your used file format is supported by Voice Pro Enterprise 4.0 Client.
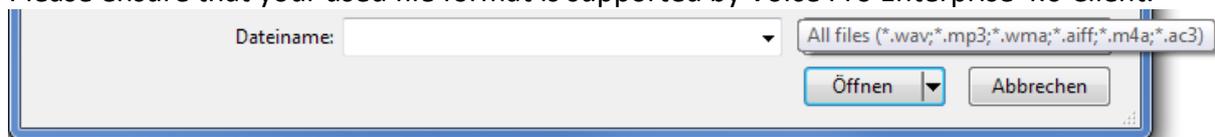
Supported are the following file formats: WAV, MP3, WMA, AIFF, M4A and ACR.

Recording source:
Has the recording been made directly in the client Voice Pro Enterprise 4.0 or has been used a speech recognition suitable dictaphone?

Recording quality:
Please take care that the dictation surrounding is as quiet as possible. E.g. close the window to keep out traffic noise. Background noises can have a negative effect on the recognition quality. Some devices also provide microphones with an ambient noise filter.

Tips concerning pronunciation and the way of speaking:
While dictating please have in mind a clear and articulated pronunciation, best is to speak moderate and to avoid an excessive accent as well as a slowed down speech. Please dictate fluently and natural.

Remember to dictate the punctuation marks.

For example: "How do you do QUESTION MARK".

A list of all supported Voice Pro Enterprise 4.0 voice commands you can find in chapter 6.

Important is also to keep the correct distance to the microphone.

3. Basic Program Components

3.1. The User Interface

Besides the scalable editor, the application window of Voice Pro Enterprise 4.0 includes a comprehensive multi-function ribbon with tabs that contain logically organized groups. From these, all the features of Voice Pro Enterprise 4.0 can be easily operated.

File Tab:
Create a new document (**New** button), open an existing document (**Open** button), save an open document (**Save** or **Save As** buttons), save a recorded audio file (**Save Audio As** button), select one of the printing options (**Quick Print**, **Print** or **Print Preview** buttons) and go one step back or forward (**Undo** or **Redo** buttons).

Speech Recognition Tab:
The tab **Speech Recognition** includes all features related to speech recognition. The following chapters contain detailed descriptions of all options.

Edit, Insert, Page Layout and View tabs:
These tabs include text formatting, view and edit functions, supported by Voice Pro Enterprise 4.0 to adapt lay-out.

Also available is a customizable **Quick Access Toolbar**. Depending on personal preference, the toolbar can be placed above or below the multifunction ribbon. To place the toolbar, right-click a vacant area on the multi-function ribbon and choose one of the following options:
Show Quick Access Toolbar Above the Ribbon or
**Show Quick Access Toolbar Below the Ribbon**.

3.2. Language Selection

Voice Pro Enterprise 4.0 supports the languages German, British English and American English. For the selection please switch to **Settings** on the tab **Speech Recognition**. The shown languages depend on the license you bought.
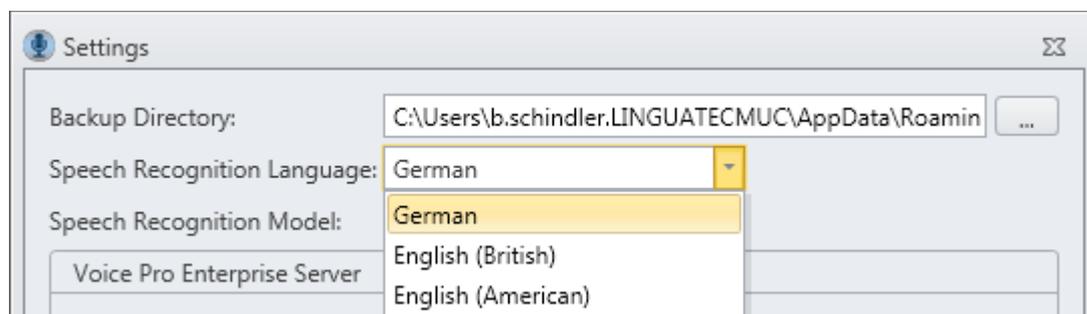
3.3. Topic Selection

It depends on your license which selection will be offered to you on under **Settings** ->
Speech Recognition Model. For German you can choose a general vocabulary (**Common**) or
an extension for **Legal** or **Medical**.
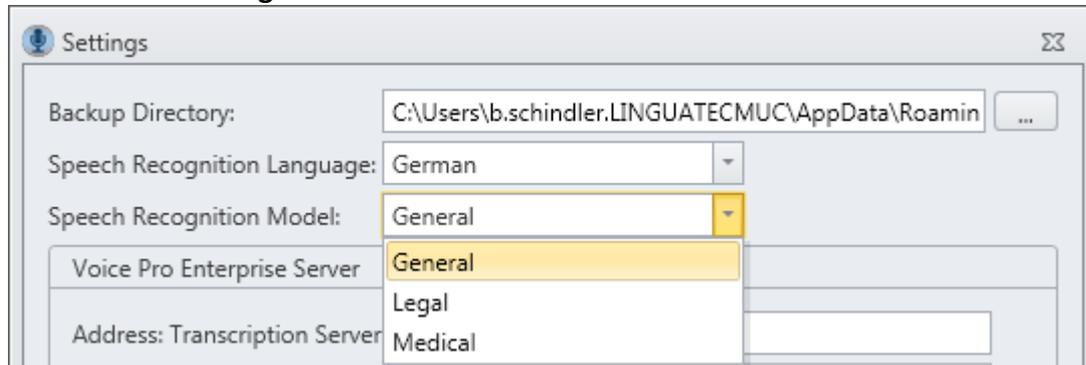
The topics **Medical** and **Legal** contain specialized vocabulary and abbreviation lists. Beneath
the general vocabulary the selected topics will be used for the speech recognition.
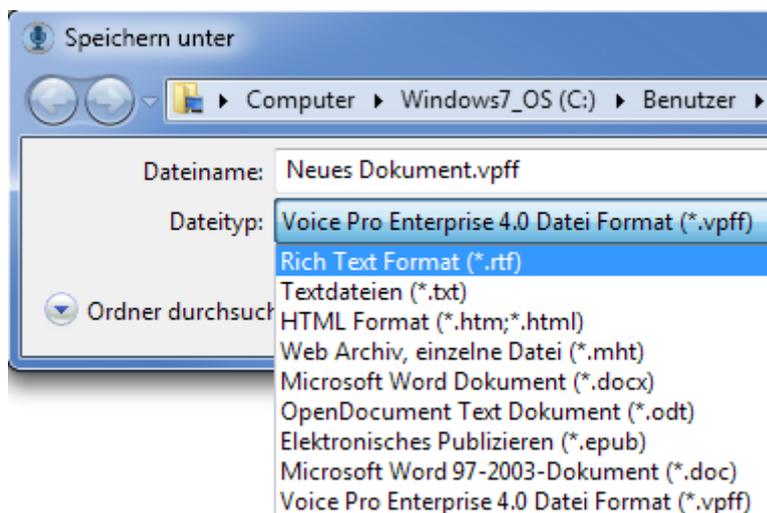
3.4. The Text Window

The recognized text will be inserted in one or more processing steps into the text window.
From there it can be saved or adjusted manually.

Clear text window:
A click onto the button **New** will clear the text window and a new document will be created.

Save text:
You can save your text via the buttons **Save text** or **Save text as…** on the tab **File**. Voice Pro
Enterprise 4.0 uses the following file formats:
.rtf, .txt, .htm, .html, .mht, .doc, .docx, .odt, .epub, .vpff.

Open text:
Via the button **Open** on the tab **File** you can open an existing file in the text window of Voice Pro Enterprise 4.0.

Voice Pro Enterprise 4.0 uses the following file formats:
.rtf, .txt, .htm, .html, .mht, .doc, .docx, .odt, .epub, .vpff.

3.5. Save Audio

Save audio file:
For the future revision or correction of your dictation, it can be useful to save the associated audio file. This will enable you (or the person doing the correction) to replay any time what has been said and to compare it with the recognized text.

In addition, the saved audio file can also be uploaded for the recognition to the server at any time. This may be necessary if there is no connection to the server during dictation or if the connection has been lost.

Procedure:

Please click onto the button **Save Audio as** on the tab **File.** The button is active only when an audio file is available, i.e. if you have dictated beforehand. As audio format **.wav** is available.

If you want to save text and audio together in one file, Voice Pro Enterprise 4.0 offers the native file format **.vpff**. VPFF files can be opened and processed only in Voice Pro Enterprise 4.0. See section 3.6.

3.6. VPFF: The file format for saving text and audio

The programs own VPFF file format saves audio and text together in one file.

To save text and audio together in the Voice Pro Enterprise file format .vpff:
After the recognition of the direct dictation or of the uploaded audio file you can save the recognized text and the corresponding audio together in one file. For this case please use the native file format **.vpff** of Voice Pro Enterprise 4.0.

Click on the button **Save as,** on the tab **File,** enter a file name and select file type **.vpff.**

To open a .vpff file in Voice Pro Enterprise 4.0:
Click onto the button **Open**, on the tab **File** and choose your desired VPFF file
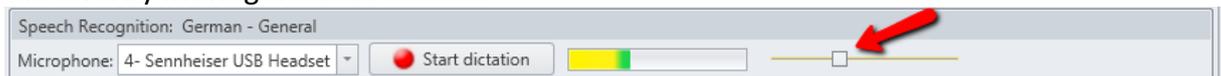
4.   Dictation

The speech recognition Voice Pro Enterprise 4.0 supports direct dictation as well as the audio file recognition (see chapter 5).
To start the direct dictation, please proceed as follows:

- At first switch onto the tab **Speech Recognition**.
- In the field **Microphone** your microphone should be displayed (see tips in the chapter **First Steps**)
- Microphone check:
  When speaking into the microphone the volume level indicator on the right side of the **Dictate** button should show reaction. Please pay attention to the correct dictation volume and distance to the microphone. The level should move within the green area.

  If the level indicator reaches the red zone, the recording is overmodulated. If the level indicator stays only in the yellow zone the recording is undermodulated. Adjust the level by moving the slide control.

- A move to the left reduces the level to avoid overmodulation, a move to the right increases the level to avoid undermodulation.

- Start the dictation via clicking onto the red dictate button.

  A message box is displayed.
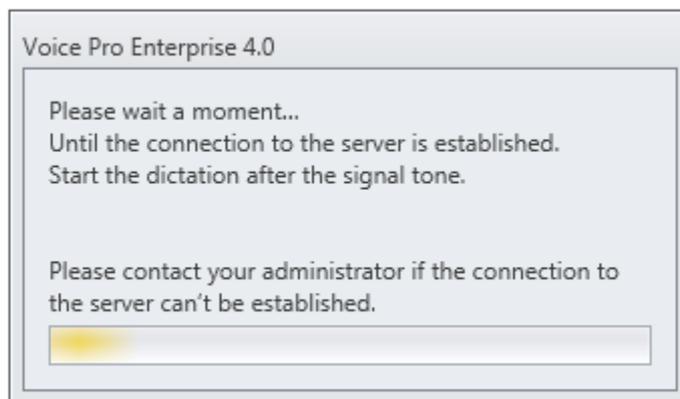
- Server status:
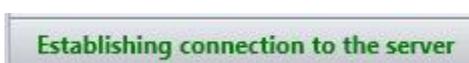
  Please also take a short view to the bottom left in the status bar, whether the connection to the server has been built up.

No server connection

If no connection to the server could be build up it might only be a brief interruption of the server connection. Please wait for a moment. If the connection should not rebuild, please contact your administrator. Send him the error description shown in the status bar.

- Start your dictation after the signal tone
- The recognized text will be displayed in the text field within a few moments..
- If you want to make changes in the text, just click onto the **End** button and handle the necessary corrections.

Stop dictation

- During dictation and the process of recognition the text can't be edited.

While the text correction it may be useful to compare it with your dictation. Therefore the Voice Pro Enterprise dictation client offers a convenient way to playback your dictation.

Click on the tab **Speech Recognition,** in the group **Play Back,** on the button **Play Back of Document/Selection** (for playing back the complete document or a selection) respectively on **Play back from here** (for playing back from the cursor position).

To end play-back use the button **Stop Play Back.**

Note: This button is only active after the start of your dictation. Previously, this feature will be shown grayed.
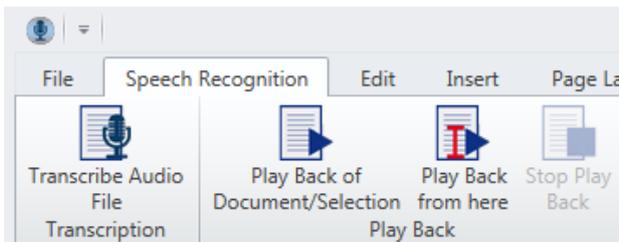

5.   Audio File Recognition (Transcription)

With the speech recognition Voice Pro Enterprise 4.0 you can convert direct dictations or recorded audio files into text. The supported audio file formats are .wav, .mp3, .wma, .aiff, .m4a and .ac3.
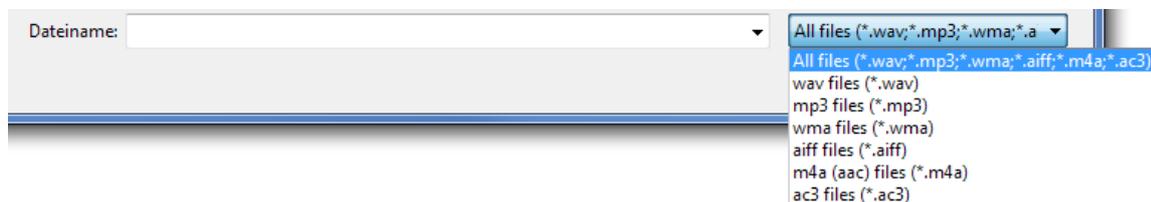
Please note the following guidelines:

- Please ensure that you have access to the audio file and that it contains no write protection
- Click on the tab **Speech Recognition,** in the group **Transcription** on the button **Transcribe Audio File.**
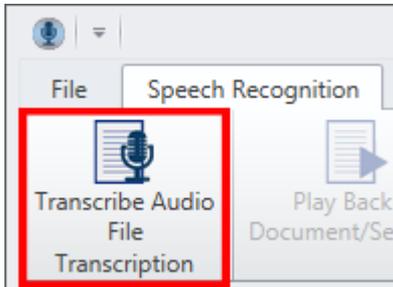
- Choose the desired audio file.
- The file will be uploaded and forwarded to the recognition server for the further processing.

  The progress of upload and recognition is displayed.
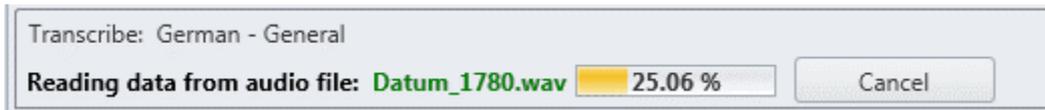
- As soon as the recognition process is finished, the result will be displayed in the text field.
- In case that you want to change parts of the text, please await that the recognition of your audio file has been completed.
- While the text correction it may be useful to compare it with your dictation. Therefore, the Voice Pro Enterprise dictation client offers a convenient way to playback your audio file with your recorded dictation. Please click in the group **Play Back** on the button **Play Back of Document/Selection** or **Play Back from here**.

  Note: The playback function is active after an audio file has been uploaded.

6.   Voice Commands

Below you find a list of all voice commands that are supported by Voice Pro Enterprise 4.0. You can dictate breaks, punctuation marks, special characters, or switch off the microphone via command.

To create a line break, for example, please dictate at the desired text passage: <**New line**>. Say <**Open bracket**> and <**Close bracket**> to set the brackets.

PURPOSE| SIGN: „If you wish to enter …"	VOICE COMMAND: „…say…"
Wraps:	

↵	Inserts a new line	New line
¶	Inserts a new paragraph	**New paragraph**
Punctuation marks, signs and symbols:		
,	abc, abc	**Comma**
.	abc. Abc	**Period**, (GB: **Full stop**)
:	abc: Abc	**Colon**
;	abc; abc	Semicolon
!	abc! Abc	**Exclamation mark**
?	abc? Abc	**Question mark**
-	abc-abc	Hyphen
—	abc — abc	**Dash**
_	abc_abc	Underscore
'	abc's 100'001	Apostrophe
…	abc… Abc	Ellipsis
(	abc (abc	**Open bracket**
)	abc) abc	**Close bracket**
[	abc [abc	Open square bracket
]	abc] abc	Close square bracket
{	abc {abc	Open curly bracket
}	abc} abc	Close curly bracket
<	abc <abc	Open angle bracket
>	abc> abc	Close angle bracket
<	abc < abc	Less than
>	abc > abc	Greater than
-	abc - abc	Minus
+	abc + abc	Plus
=	abc = abc	Equals
×	5 × 6	Multiplication sign
÷	6 ÷ 2	Division sign
±	±2	Plus minus
%	100% abc	Percent
½	abc ½ abc	One half
¼	abc ¼ abc	One quarter
¾	abc ¾ abc	Three fourths
°	90° abc	Degree
*	abc* abc	Asterisk
~	abc ~25	Tilde
@	abc@abc	at
/	abc/abc	Slash
\	abc\abc	Backslash
&	abc&abc	Ampersand
§	abc § abc	Paragraph
€	25€	Euro

$	25$	Dollar	
£	25£	Pound	
¥	25¥	Yen	
¢	25¢	Cent	
Question marks:			
„	abc „abc	**Open quotation**	
"	abc" abc	**Close quotation**	
Key:			
→	Inserts a tab stop	Tabulator	
Microphone command:			
	Turns the microphone off	Microphone off	

7.   Preferences

Voice Pro Enterprise 4.0 offers the user different options to personalize the recognition. The offered tools you can find on the tab **Speech Recognition** in the group **Options**.
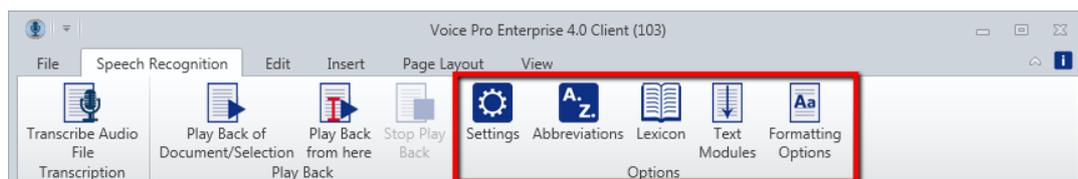
7.1. Settings

Via **Settings** you can adapt the path for the backup directory and choose language and Speech Recognition Model (depending on your licence).

If you activate the option „Check for program updates at start-up", the Voice Pro Enterprise 4.0 Client Application will be automatically updated.

Note: For the installation of an update administrative rights are necessary.

Please confirm changes in your settings with **OK**.
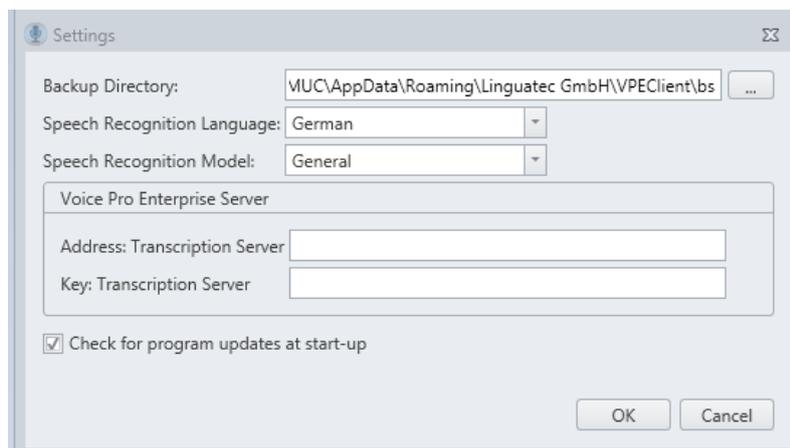
7.2. Lexicon

In the user dictionary (Button **Lexicon**) you can create, adapt or delete entries for your licensed language. The lexicon entries are assigned to your user ID

The lexicon structure is:

a) Text
b) Sounds like (textual description of the pronounciation)
c) Type

- Search field:
If you want to start a **search** in your lexicon, please enter your search term in the search field. You can search for the lexicon entry as well as for the textual description or the type. All matching entries will be displayed.

- Button Create new item
Click this button when you want to add a new lexicon entry.

For classification, please chose at first the fitting type of your lexicon entry.
You can choose between **First Name**, **Last Name**, **City**, **Company** and **Street**. For all other
entries, please chose "**Unspecified**". In the second line (**Text**) please enter the word for
which you want to create the lexicon entry. Please enter the pronunciation of your item
with regular text in the following text field (**Sounds like**) For to save your lexicon entry,
please click onto the button **OK**. When you click onto **Cancel** the window will be shut down
without saving the item.

Example of an entry for **Linguatec** with a textual transcription for the category (**Type**)
Company:
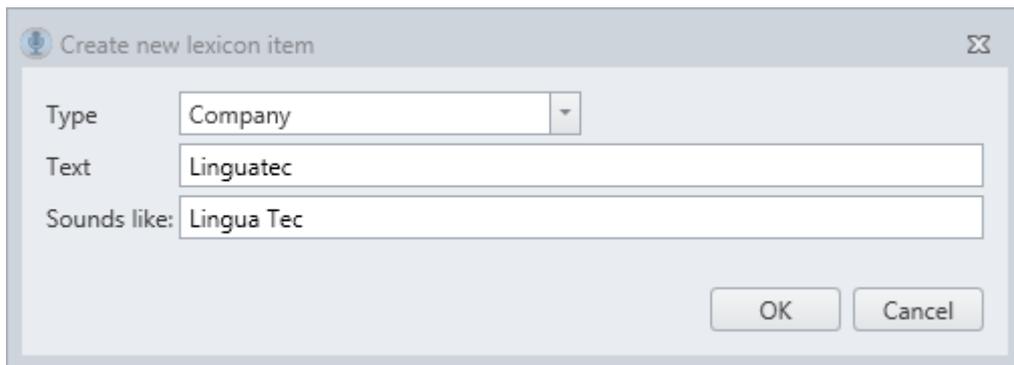
- **Button: Edit item**
If you wish to change an existing lexicon item, please mark it in the list and then click onto
the button **Edit item.**
In the window **Edit lexicon item** you can make your desired changes and save them by
clicking onto **OK**.
Via **Cancel** the window will be shut down without saving the changes in your entry.
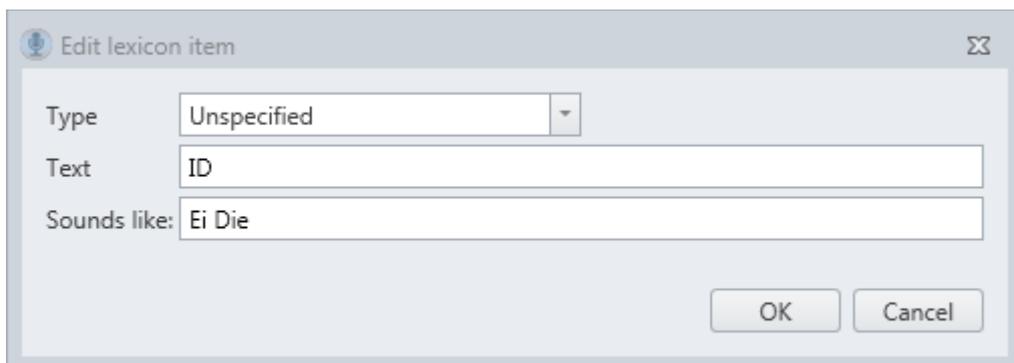
- **Button: Delete**
If you want to delete an existing entry, please mark it in the abbreviation list and then click
onto the button **Delete**.

Note:
Changes in the dictionary require an actualization of the language model on the server.
Therefore after having performed changes in the dictionary, during the first dictation the
recognition results will be displayed with a delay of approx. 25 seconds.

7.3. Abbreviations

The list of **Abbreviations** (button **Abbreviations**) includes all common abbreviations - depending on your selected topic and your licensed language/s. It can be enabled or disabled according to your needs; you can also adapt or add new entries. To the list of abbreviations you can also add substitutions. Thus you can achieve personalized recognition results in future dictations.

The shown list depends on your chosen topic (**General**, **Legal** or **Medical**) and is assigned to a defined user (see entry in the line **User**).

The list structure is:
a) **Status** (activated or deactivated)
b) **Spoken Word/Word Order**
c) **Abbreviation**
d) **Context**

- Search field:

If you want to start a **search** in your abbreviation list, please enter your search term in the search field above the abbreviation list. You can search for the abbreviation as well as for the spoken word/ word sequence. All matching entries will be displayed.

- Activate / deactivate an abbreviation entry:

To enable or disable an entry, please click into the checkbox in the column **Activated.** A tick in the checkbox indicates that the corresponding shortcut entry has been activated.

- Button: Create new abbreviation:

Add a new entry in your abbreviation list. In the first line (**Spoken word / Word Order**) please enter the word or word sequence for which the abbreviation or replacement should take place.

In the second line (**Replace with abbreviation**) you enter a shortcut or replacement.

In the next area (**Only in specific context**) dependencies may be specified more precisely. You can specify whether the abbreviation should only apply before or after numbers or before or after a certain word/ word sequence which can be defined.

To save your abbreviation entry, please click onto the button **OK**.

If you click onto **Cancel** the window will be shut without saving the entry.
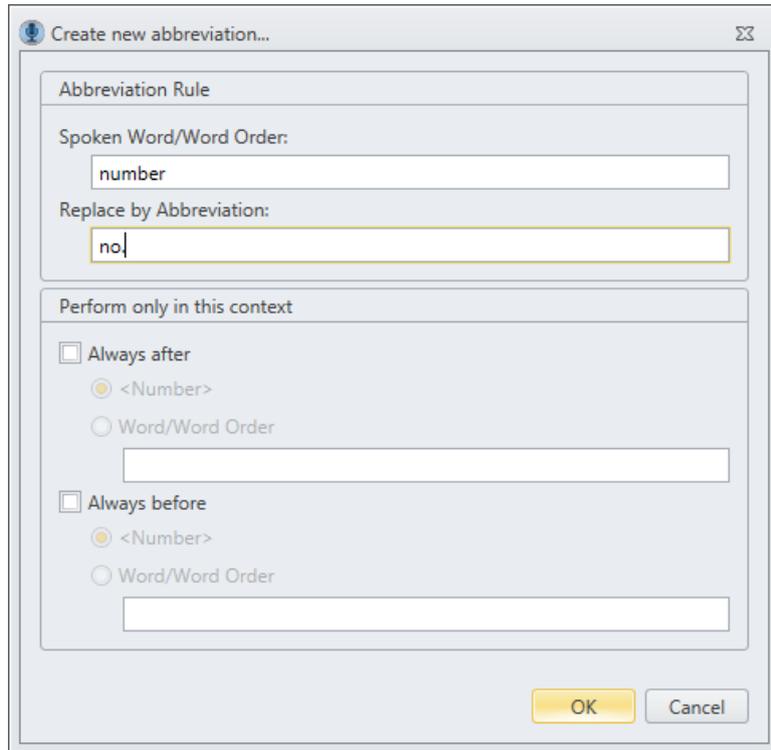
Example for an abbreviation entry in cases, that the word **number** should be abbreviated by **no.** if it will be followed by a number. For example: no. 1

- **Button: Edit abbreviation**
If you wish to change an existing abbreviation entry, please mark it in the list and then click onto the button **Edit abbreviation.**
In the window **Edit abbreviation rule** make your desired changes and save them by clicking onto **OK**.
Via **Cancel** the window will be shut without saving the changes in your entry.

- **Button: Delete**
If you want to delete an existing entry, please mark it in the abbreviation list and then click onto the button **Delete**.

- **Buttons: Up and Down**
Please mark an entry in your abbreviation list and click onto the button **Up** if you want to locate it on a higher position in the hierarchy. If you click on **Down** you can locate it on a lower position in the hierarchy.

- **Button: Activate all**
This button deactivates all existing entries of your abbreviation list.

- **Button: Deactivate all**
This button deactivates all existing entries of your abbreviation list.

- **Button: Reset to default**
Please click onto this button to reset the settings of the abbreviation list. Only the custom-made entries will remain unmodified.

Important hint:
If your abbreviation rule contains several words please ensure a fluent speaking and avoid breaks between them while dictation.
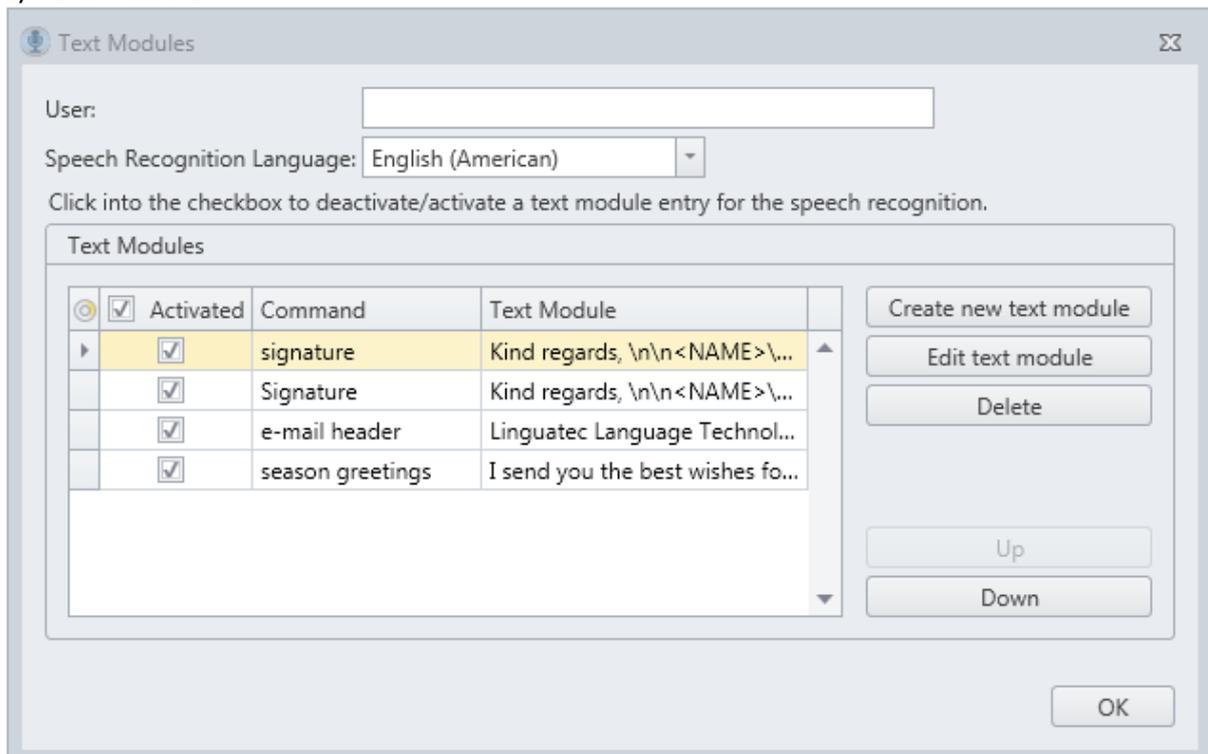
7.4. Text Modules

You can define recurrent texts as **Text Modules**. You just say the keyword (Command) for example "Signature" and the defined text module will be integrated into the text.

The list structure is:

a) **Status** (activated or deactivated)
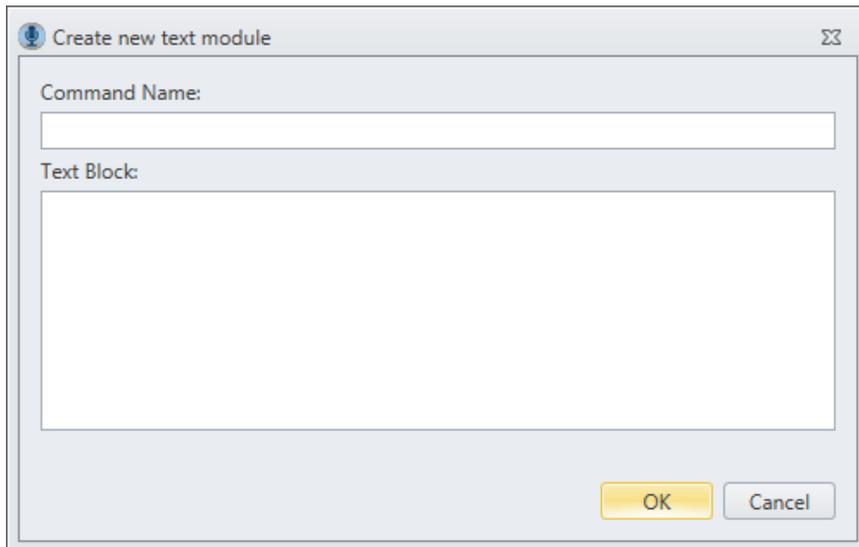
b) **Command**

c) **Text Module**

- **Activating or deactivating a text module:**
Please click into the checkbox in the column **Activated** to enable or disable an entry**.** A tick in the checkbox indicates that the corresponding shortcut entry has been activated.

- **Button: Create new text module**
Via this button you can create a new text module entry.

Please enter the **command name** in the first line.

In the text block, please enter the text of the **Text Module** which should appear when you dictate the command name.

Save your text module, via clicking onto the button **OK.**

Via **Cancel** the window will be shut without saving the changes in your entry.

- Button: Edit text module
If you wish to change an existing text module entry, please mark it in the list and then click onto the button **Edit text module.**
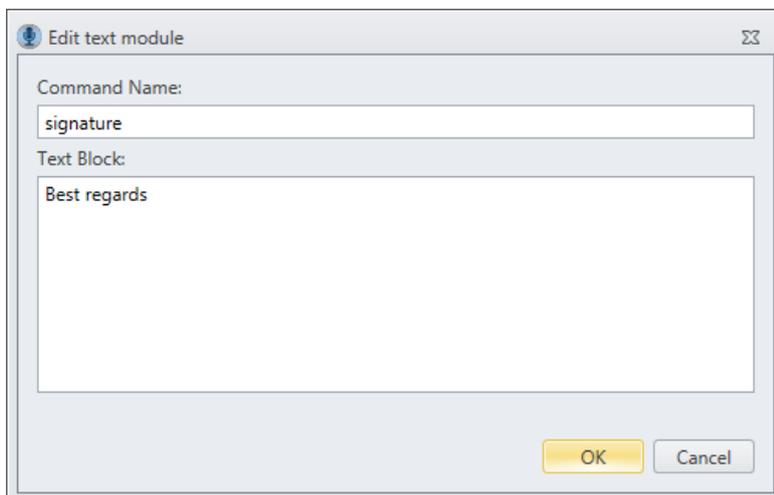
In the window **Edit text module** make your desired changes and save them by clicking onto **OK.**

Via **Cancel** the window will be shut without saving these changes.

- Buttons: Up and Down
Please mark an entry in your text module list and click onto the button **Up** if you want to locate it on a higher position in the hierarchy. If you click on **Down** you can locate it on a lower position in the hierarchy.

- **Button: Delete**
If you want to delete an existing entry, please mark it in the list of your text modules and then click onto the button **Delete**.


7.5. Formatting Options

In the **Formatting Options** you define your preferred spelling of the pronouns.
You can decide whether the spelling of the pronouns should be handled context-sensitive. In this case please activate the first entry and save it via **OK**.
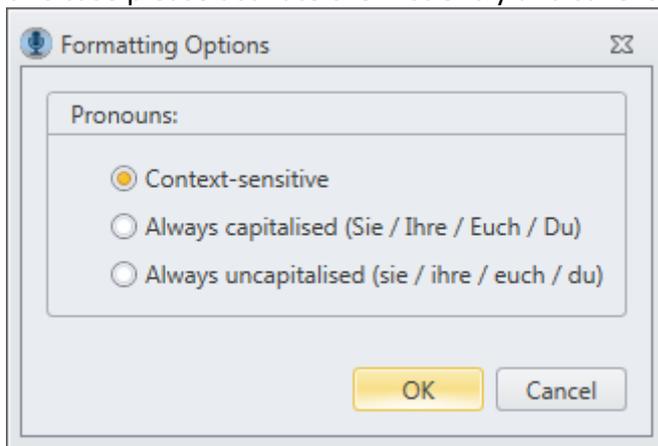
While the next recognition process this rule will be applied.
Alternatively, you can choose if you wish that all pronouns should always be written capitalised.
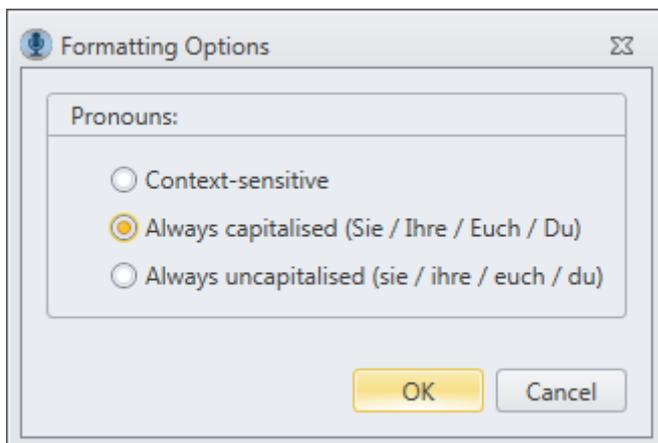
In this case please activate the second entry (**always capitalised**) and save it via **OK**.
Finally, you can choose that the pronoun will always be written with small letters.
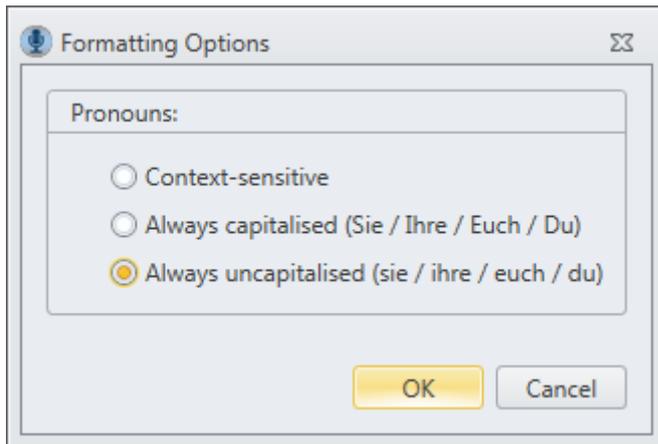
In this case please activate the third entry (**always uncapitalised**) and save it via **OK**.

8. What to do when these messages are displayed

The recording level is too low.

Please adjust the level of your recording device. Drag the slider a bit more to the right.

 Please see also chapter 2.1, section **Microphone setting..**.

The recording level is too high.

Please adjust the level of your recording device. Drag the slider a bit more to the left.

 Please see also chapter 2.1, section **Microphone setting..**.

No server connection.

The connection can't be established, is lost or was interrupted.

There may be several possible reasons why the connection to the server is missing, e.g.:

a) In the client software (Tab **Speech Recognition** – group **Options** – button **Settings** - area **Voice Pro Enterprise Server**) one or several of the entered values are not correct (IP, Port and/or Transcription Server Key). Please contact your administrator to check the entries.

b) The connection to the server has been interrupted due to a network failure or any other technical failure and could not be re-established. Please try it again. Otherwise please contact your administrator.

c) There exists no valid license for the selected component. Please contact your administrator.

Without a stable connection to the server, the speech recognition engine is not available. The conversion of your spoken words into text is only possible with the established

connection. In the meantime, you can save your dictation in an audio file (Tab **File** – button **Save Audio As**). As soon as the connection has been re-established, this audio file can be transcribed (Tab **Speech Recognition** – group **Transcription** – button **Transcribe Audio File**).

Example:

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