

Voice Pro®

Enterprise 4.0





Speech Recognition

Voice Pro Enterprise 4.0

(Java-Client vpe-client-4.0-20160503-
1505.jar)

MANUAL



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1 Welcome to Voice Pro Enterprise 4.0

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 post processing tasks.

Secure speech recognition on the company's own server:

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 recognition is performed on the company's own servers. The recognized text can be edited and 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 a high recognition accuracy.

Individual adaptability:

Voice Pro Enterprise 4.0 adapts to individual speaking habits. 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:

Whether you want to use the speech recognition on your PC in the office, on a tablet in meetings or on your Smartphone on the go: The Voice Pro Enterprise 4.0 speech recognition is available to all employees whenever it is needed, whether you want to dictate in almost real time or 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 First steps

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

2.1 Before dictation

Before starting the dictation please check the following issues:

- **Microphone connection:**

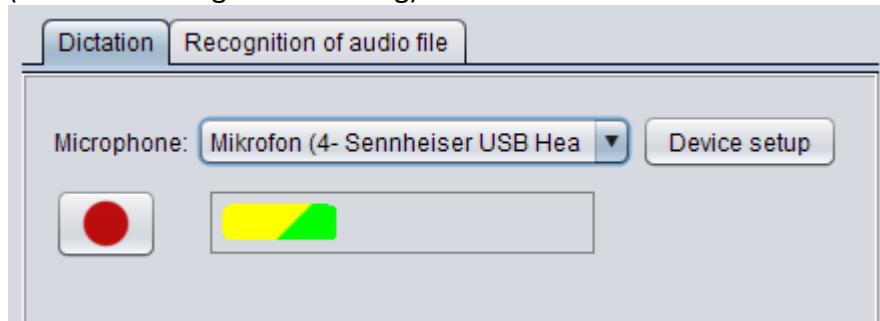
Please connect a suitable microphone for the speech recognition.

- **Microphone selection:**

Please ensure that on the tab **Dictation**, in the text field **Microphone**, the appropriate microphone is selected and that



in the field below there appears a sound level 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 Start dictation button) is responding while speaking into the microphone and stays mainly in the zone which is marked in green color. 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 and remember to dictate also the punctuation marks.

For example: "How do you do QUESTION MARK"

A list with all supported voice commands you can find in chapter 6.

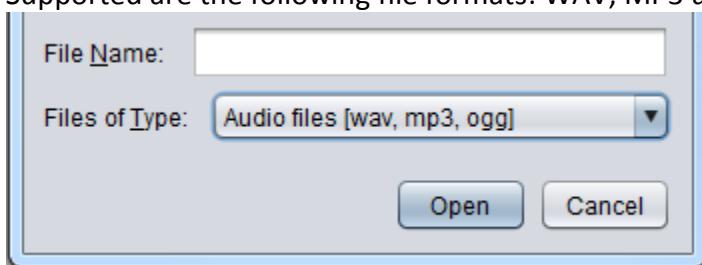
Besides to the direct dictation Voice Pro Enterprise 4.0 supports also the transcription of audio files. Therefore, an audio file needs to be uploaded to the server. There the recognition will take place. Then the recognized text will be displayed in the text field.

2.2 Before the 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. Supported are the following file formats: WAV, MP3 and OGG.



- **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 and remember to dictate also the punctuation



marks.

For example: "How do you do QUESTION MARK"

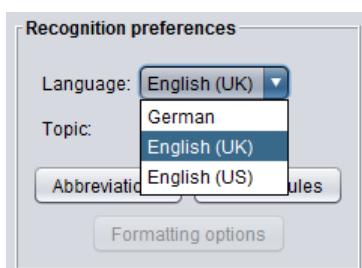
A list with all supported voice commands you can find in chapter 6.

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

3 Basic Program Components

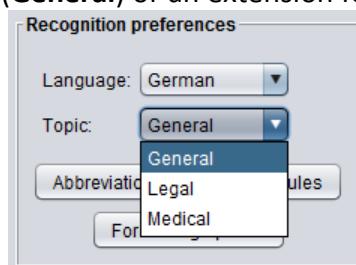
3.1 Language Selection

Voice Pro Enterprise 4.0 supports the languages German, British English and American English. For the selection please switch into the dropdown menu of the **Language** list in the group **Recognition preferences**. The shown languages depend on the license you bought.



3.2 Topic Selection

It depends on your license which selection will be offered to you in the group **Recognition preferences** in the **Topic** dropdown menu. For German you can choose a general vocabulary (**General**) 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.

3.3 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.

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

3.4 Save and Open Text

Save text:

You can save your text via the buttons: **Save text** or **Save text as...** .

Voice Pro Enterprise 4.0 uses the text format **.rtf**.



When choosing **Save text as...** a file name is proposed. It contains a clear allocation the values of date and time. If you have chosen in the settings a default path for saving text it will be chosen as proposed path.

Open text:

Via the button: **open text** you can open any existing text file in the format .rtf in Voice Pro Enterprise 4.0.

Please click onto the button **open text**, switch into the desired directory, select your file and click onto the button **Open**.

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 under...** either accept the suggested file name or choose your own one, select the audio format (**wav** or **mp3**) and click onto the button **Save**. If you have selected a default path for the saving of the audio files in the **Settings**, the proposed path will correspond to it.

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 program's own VPFF file format saves audio and text together in one file.

To open a .vpff file in Voice Pro Enterprise:

Click onto the button **Open VPFF...**, choose your desired VPFF file and click onto the button **Open** to start the command.

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.

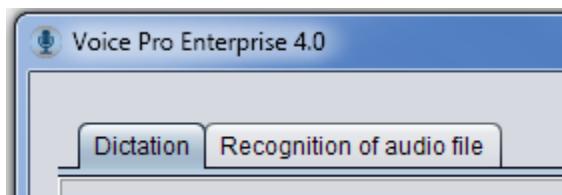
Click onto the button **Save in VPFF format as...**, either accept the suggested file name or choose your own one, then click onto the button **Save**.

4 Dictation

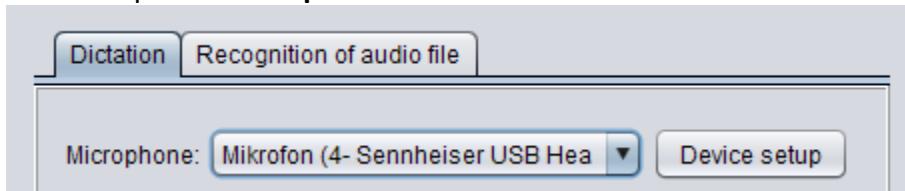
The speech recognition Voice Pro Enterprise 4.0 supports direct dictation as well as the audio file recognition (see chapter 5).

To start the direct dictation, please proceed as follows:

- At first switch onto the tab **Dictation**.



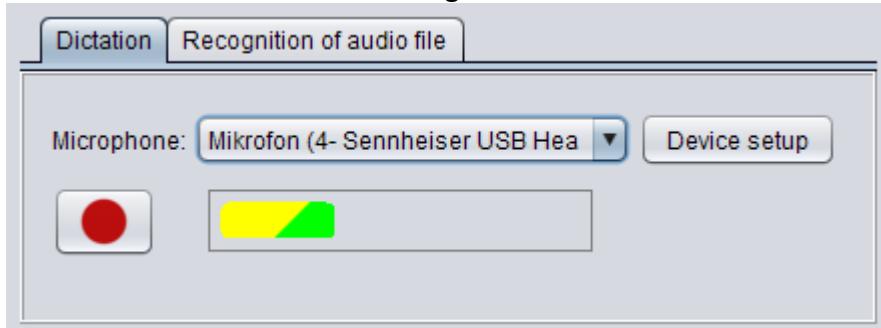
- In the field **Microphone** you should find the entry of your used microphone - see tips in the chapter **First Steps**



- Microphone check:

When speaking into the microphone the volume level indicator on the right side of the red dictation button should show reaction. It displays the input signal.

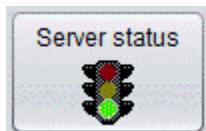
Please pay attention to the correct dictation volume and distance to the microphone. The level should move within the green area.





- Server status:

Please also take a short view to the signal light at the right side. It displays the server status.



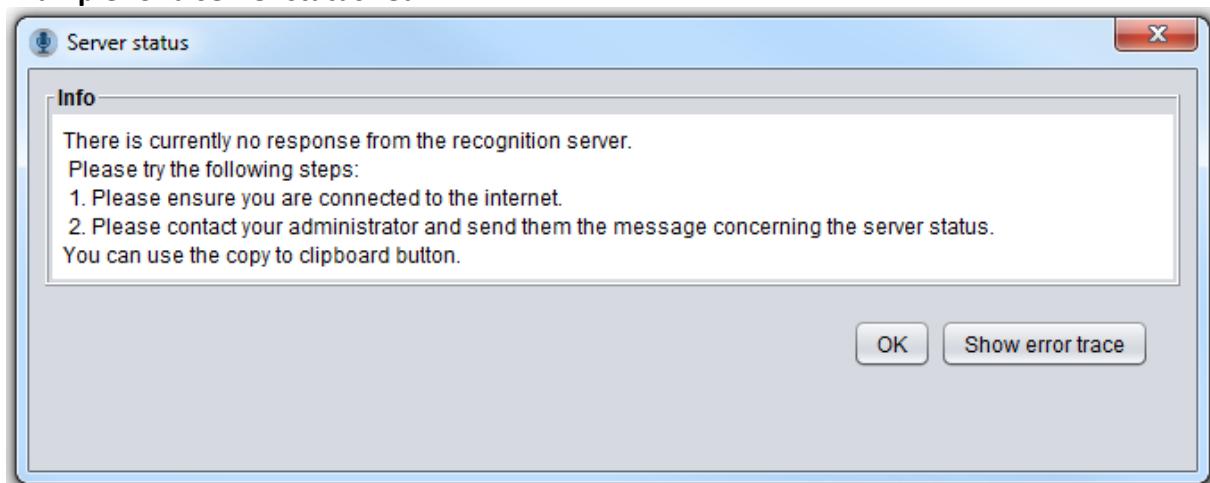
Server status **green** indicates that everything is working properly and that the dictation can be started.

The color **yellow** indicates a missing license. Please contact your administrator.



Server status **red** indicates that there is no connection to the speech recognition server. In case that it is only a brief interruption of the server connection, please wait a moment until the light changes to green again. If the connection should not rebuild, please contact your administrator. Please click onto the button **Server Status** and then on: **Show error trace**. Send the shown error description to your administrator.

- Example for a server status red:



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



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 pause button and handle the necessary corrections.



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. Please click onto the black play button in the area **Play audio**.



The volume can be changed via the volume slider. Dragging to the right increases the volume.

Note:

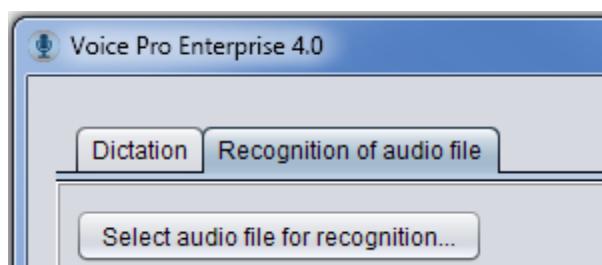
The playback function is active after the start of your dictation. Previously, this feature will be shown grayed.

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 and .ogg.

Please note the following guidelines:

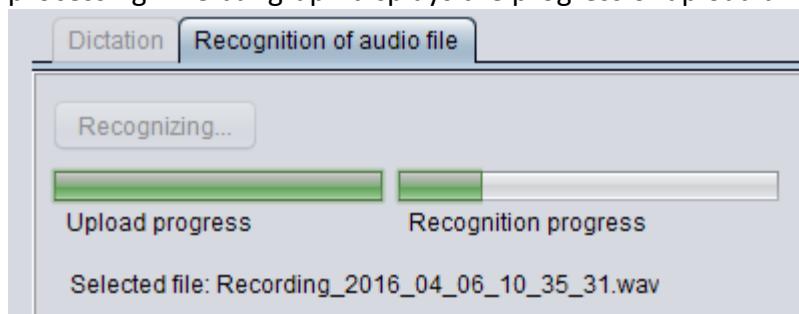
- Please ensure that you have access to the audio file and that it contains no write protection.
- In the window of the Voice Pro Enterprise dictation client please switch onto the tab **File recognition**.



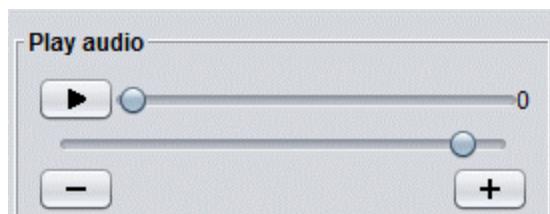
- Click onto the button **Recognition from audio file**.
- Choose the desired audio file.



- The file will be uploaded and forwarded to the recognition server for the further processing. The bar graph displays the progress of upload and recognition.



- 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 onto the black play button in the area **Play audio**.
The volume can be changed via the volume slider. Dragging to the right increases the volume.



Note: The playback function is active after an audio file has been uploaded. Previously, this feature will be shown grayed.



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
¶	Inserts a new paragraph
Punctuation marks, signs and symbols:	
,	abc, abc
.	abc. Abc
:	abc: Abc
;	abc; abc
!	abc! Abc
?	abc? Abc
-	abc-abc
—	abc — abc
_	abc_abc
'	abc's 100'001
...	abc... Abc
(abc (abc
)	abc) abc
[abc [abc
abc] abc	
{	abc {abc
}	abc} abc
<	abc <abc
>	abc> abc
<	abc < abc
>	abc > abc
-	abc - abc
+	abc + abc
=	abc = abc
×	5 × 6
÷	6 ÷ 2
±	±2



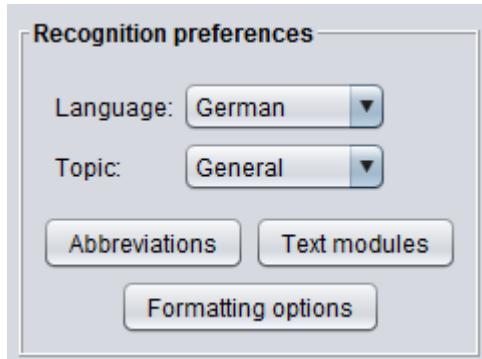
%	100% abc	Percent
½	abc ½ abc	One half
¼	abc ¼ abc	One quarter
¾	abc ¾ abc	Three fourths
°	90° abc	Degree
*	abc* abc	Asterisk
~	abc ~25	Tilde
@	abc@abc	at
/	abc/abc	Slash
\	abc\abc	Backslash
&	abc&abc	Ampersand
§	abc § abc	Paragraph
€	25€	Euro
\$	25\$	Dollar
£	25£	Pound
¥	25¥	Yen
¢	25¢	Cent
Question marks:		
„	abc „abc	Open quotation
“	abc“ abc	Close quotation
Key:		
→	Inserts a tab stop	Tabulator
Microphone command:		
	Turns the microphone off	Microphone off



7 Recognition Preferences

Voice Pro Enterprise 4.0 offers the user different options to personalize the recognition.

The offered tools you can find in the area **Recognition preferences**.



The list of **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.

Recurrent texts can be defined as **Text modules**. You just dictate the keyword (command), for example, "Standard signature", and the defined part of the text will be inserted into the text.

With clicking onto the button **Formatting options** you are able to specify the desired spelling of pronouns, when your speech recognition language is set to **German**.

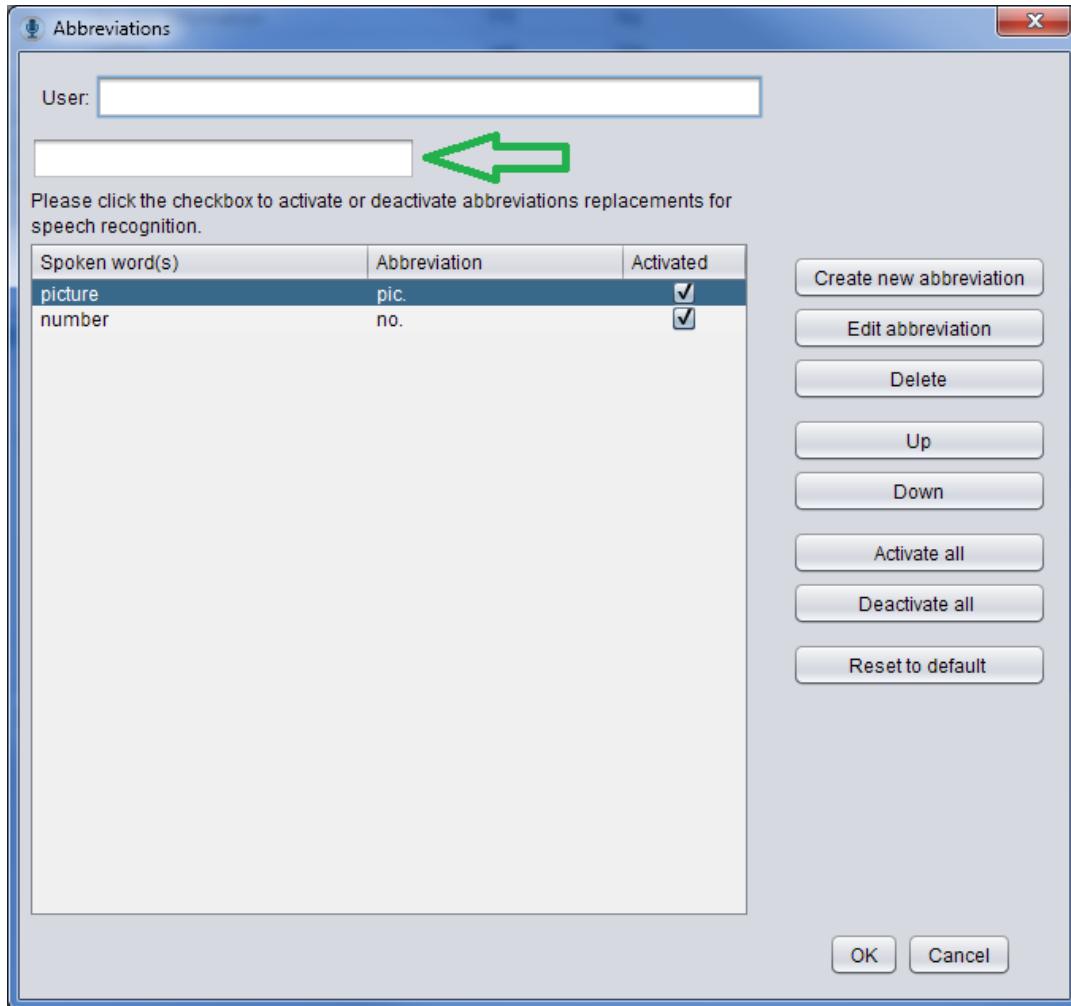
7.1 Abbreviations

To open the window **Abbreviations** please click onto the eponymous button in the area **Recognition preferences**.

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) Spoken word/word sequence
- b) Abbreviation
- c) Status (activated or deactivated)



- 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:

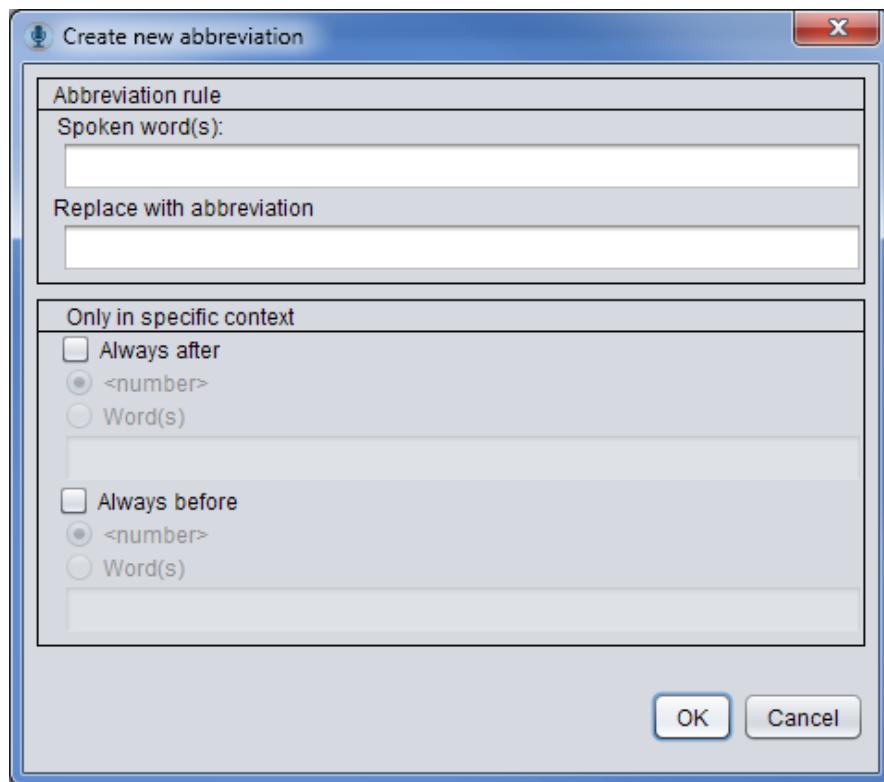
Add a new entry in your abbreviation list. In the first line (**Spoken word(s)**) please enter the word or word sequence for which the abbreviation or replacement should take place.

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

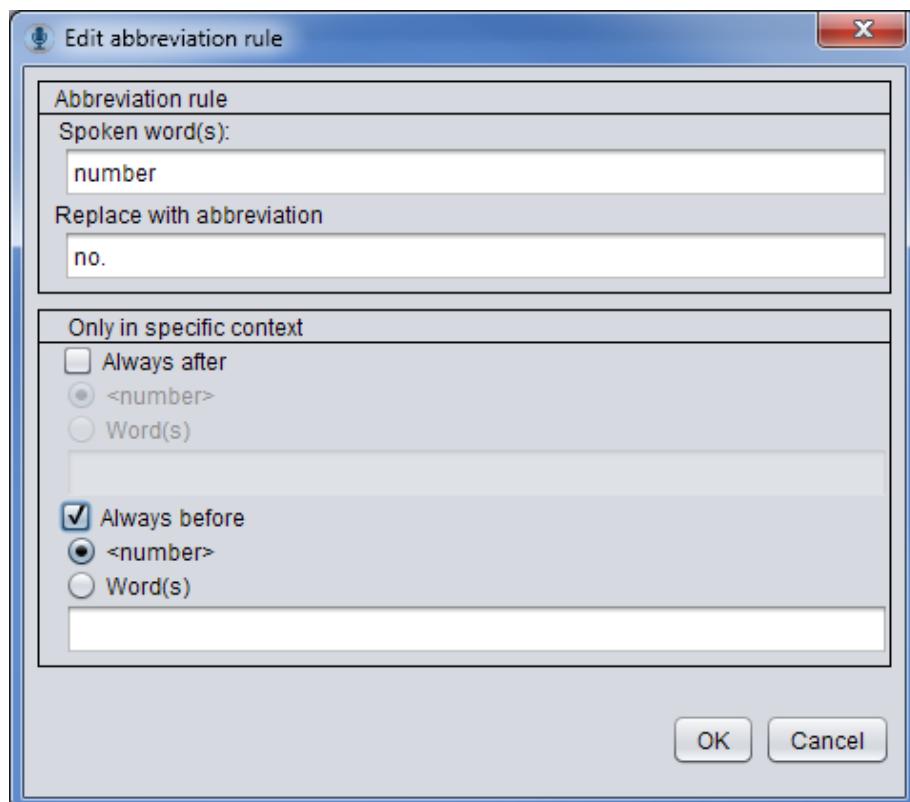
In the next area (**Only in specific context**) dependencies may be specified more precisely. You can specify whether the abbreviation should only apply before or after numbers or before or after a certain word(s) which can be defined.



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 activates 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 the words while dictation.

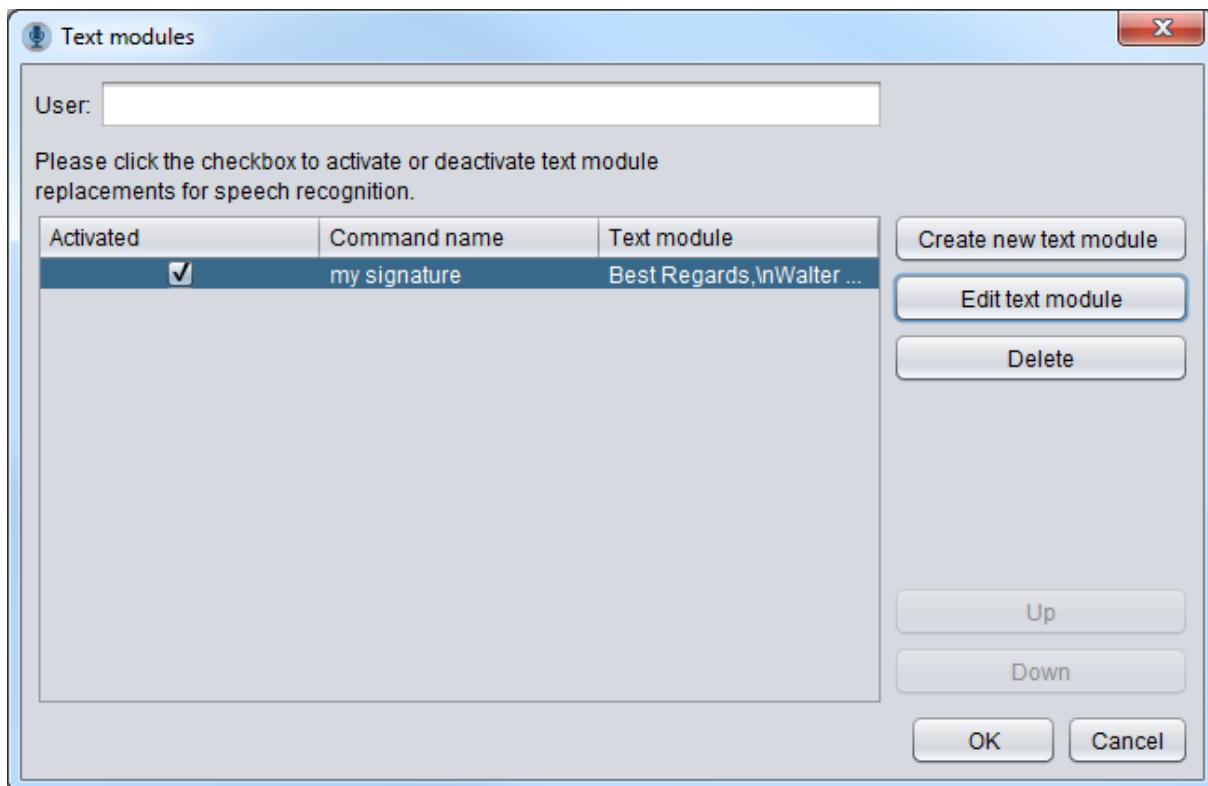


7.2 Text Modules

You can open the window **Text modules** by clicking onto the eponymous button in the area **Recognition preferences**.

The list structure is:

- a) **Status** (activated or deactivated)
- b) **Command**
- c) **Text module**



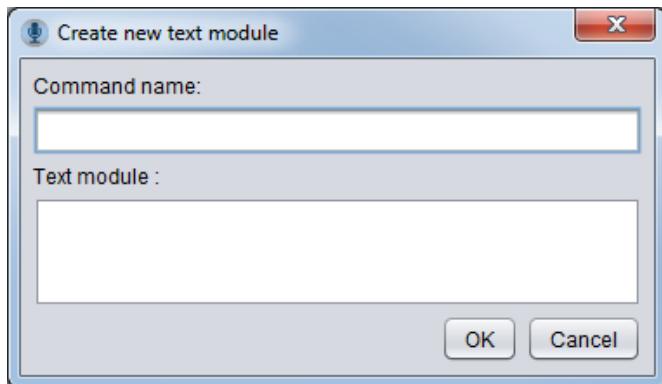
- Activating or deactivating a text module:

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 name of the **command** in the first line.

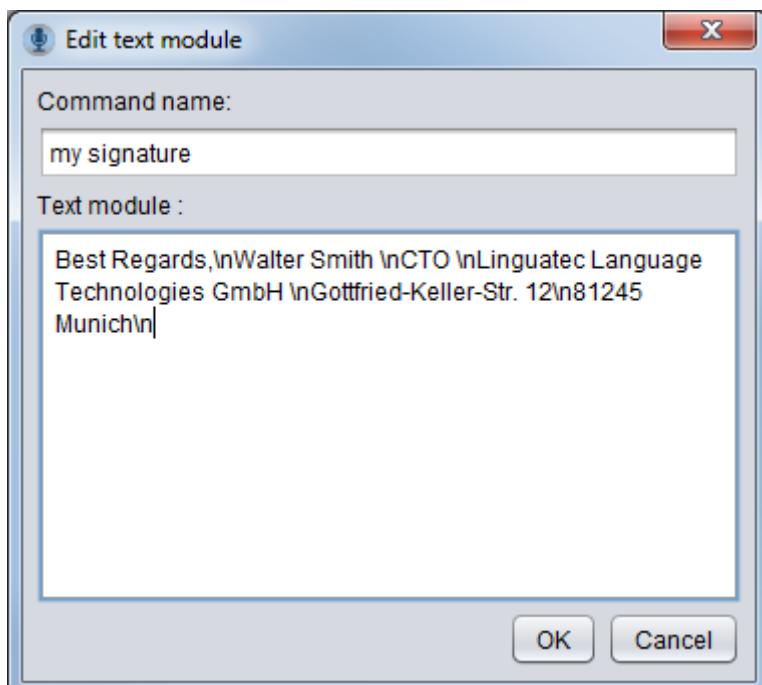
In the text block, please enter the text of the **text module** which should appear when you dictate the name of the command.

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**

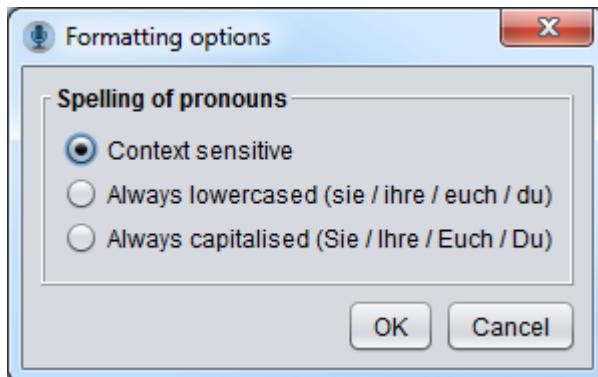
If you want to delete an existing entry, please mark it in the list of your text modules and then click onto the button **Delete**.



7.3 Formatting Options

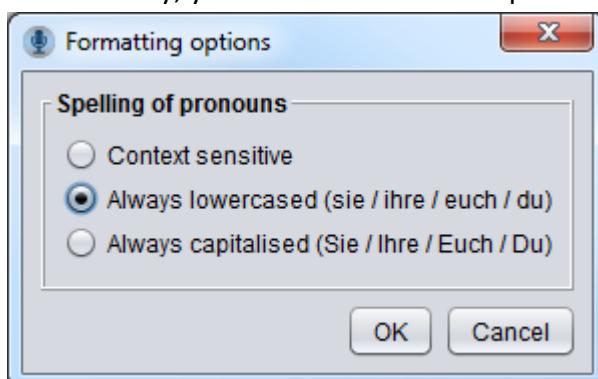
To open the **formatting options**, please click onto the eponymous button in the area **Recognition preferences**. They are available for the speech recognition language German.

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**.



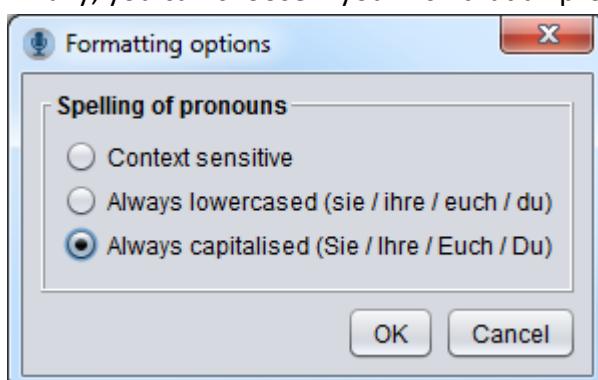
While the next recognition process this rule will be applied.

Alternatively, you can choose that the pronoun will always be written with small letters.



In this case please activate the second entry (**always lowercased**) and save it via **OK**.

Finally, you can choose if you wish that all pronouns should always be written capitalized.



In this case please activate the third entry (**always capitalized**) and save it via **OK**.



8 Settings

Additional customizations can be made via the Settings menu.

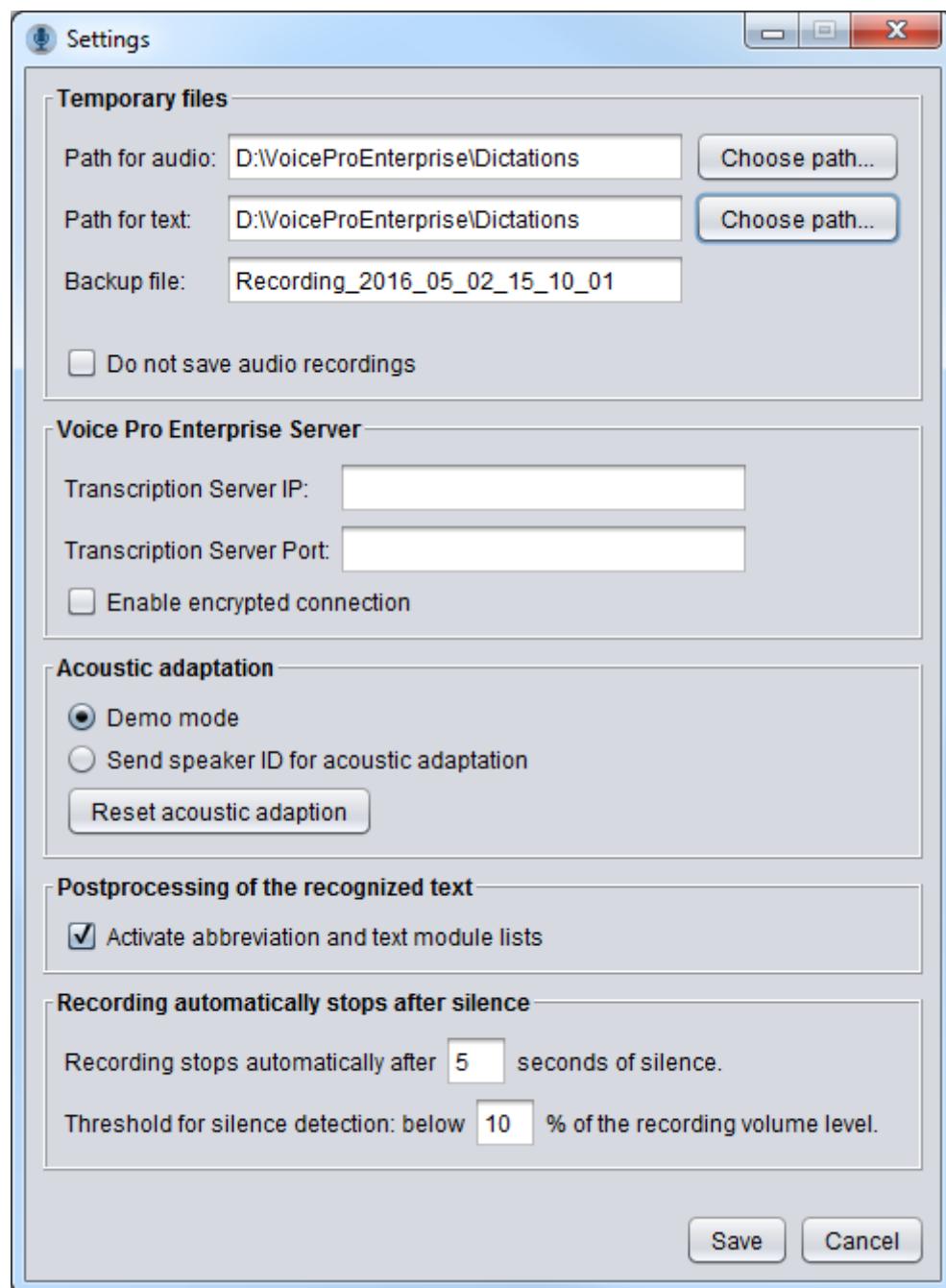
Specify the paths for the storage of audio and text files;

Determine if the audio files should be saved at all;

Enter your desired file name, or just leave it to the default name; select the mode for the acoustic adaptation, or reset it;

Decide whether and when the recording stops automatically after a silence.

And it is in the settings where the IP for the Transcription Server and its port has to be entered.





Temporary files

In the area **Temporary files** you can determine the storage path for your audio files (**Path for audio**) and the path for the text files (**Path for text**) that have been created with Voice Pro Enterprise 4.0.

Click onto the button **Choose path** to select the desired path.

Note:

During the first start of the application there will appear a confirmation screen, allowing you to take either the default paths or to enter your own. A subsequent adjustment is any time possible via the settings menu (area **Temporary files**).

In the field **Backup file**, you can enter a custom backup file name. It is valid for the current session. When you restart the client application, a new file name will be proposed again by the system. For a unique identification it includes the current date and time.

The name can be changed at any time.

By default, the automatic saving of audio recordings is provided.

In case that you want to prevent the saving, please activate the option **Do not save audio recordings**.

The following screenshot shows the default status (disabled setting).

Temporary files

Path for audio:	IATECMUC\VoiceProEnterprise\Dictations	<input type="button" value="Choose path..."/>
Path for text:	IATECMUC\VoiceProEnterprise\Dictations	<input type="button" value="Choose path..."/>
Backup file:	Recording_2016_05_30_10_30_30	
<input type="checkbox"/> Do not save audio recordings		

Voice Pro Enterprise Server

In the area **Voice Pro Enterprise Server** please enter the IP Address of the Transcription Server (**Transcription Server IP**) and the Port (**Transcription Server Port**).

Voice Pro Enterprise Server

Transcription Server IP:	<input type="text"/>
Transcription Server Port:	<input type="text"/>
<input type="checkbox"/> Enable encrypted connection	



Postprocessing of the recognized text

In case that you neither wish the abbreviations nor the text modules to be used, please deactivate the setting **Activate abbreviation and text module lists** in the area **Postprocessing of the recognized text.** .

By default, this setting is enabled.

Postprocessing of the recognized text

Activate abbreviation and text module lists

Automatic stop of recording after silence

You can stop your dictation manually via clicking onto the Pause button  on the **Dictation tab**. In addition, you can also set an automatic recording stop (silence detection) in the settings. It can be triggered by a dictation break or silence and is defined by time value and volume level.

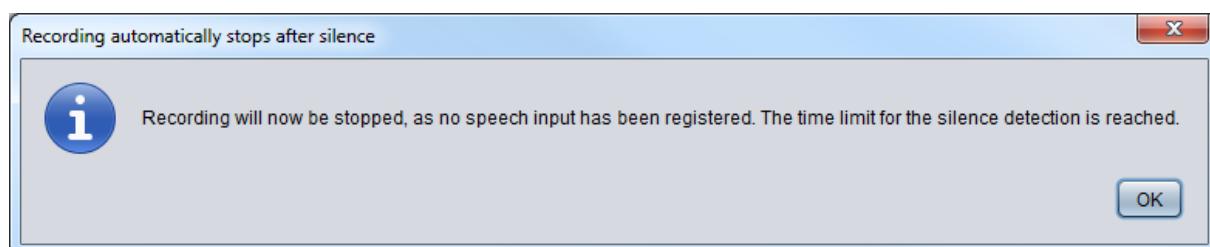
Recording automatically stops after silence

Recording stops automatically after seconds of silence.

Threshold for silence detection: below % of the recording volume level.

The recording mode will be automatically stopped when a pause in the defined length (in this example: 30 seconds) will be detected, and when during this time period the level of the recording is lower than the defined value (in this example: 10%).

The end of the recording mode will be indicated by the following message:



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