

voice[®] reader

SERVER 15

Manual



Linguatec
Language Technologies

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1 Introduction

Voice Reader Server 15 is a precise and reliable speech output program that uses remarkably natural sounding voices and is available in many languages. Voice Reader Server 15 converts any of your texts to voice. Audio output can be professionally customized using commands that are inserted directly into the text (Voice Markups). If certain terms are to be assigned a specific pronunciation, or others are to be ignored, the vocabulary can be expanded as needed. This manual will explain how to set up and use Voice Reader Server 15 on a Windows Server.

Thank you for choosing Voice Reader Server 15. We hope you enjoy using it!

For more information on Linguatec and other speech technology products, please visit our homepage at www.linguatec.net.

1.1 Technical Support

1.1.1 Support on the Internet

If you experience any problems that cannot be solved using the manual or the online help, please visit our comprehensive support area on the Internet:

www.linguatec.net/services/support

You will find a compilation of the most frequently asked questions (FAQs) there. Experience has shown that it already contains detailed instructions for quickly resolving almost all user questions.

1.1.2 Personal Support

If you have a specific problem that cannot be resolved using the FAQs, we will gladly provide you with personal support. Support will be provided via email and is free for registered users, for up to 90 days following the purchase of Voice Reader Server 15. Therefore please take care to enter your personal information correctly when activating the program.

All questions directed to support must include the following information:

- Program version
- Operating system
- Description of the error, including any error messages received

Please use the support form for your questions: www.linguatec.net/services/support/form

1.1.3 General Questions and Suggestions

Please contact us if you have any questions regarding additional languages or other language technology products. Use the contact form provided at: www.linguatec.net/contact

Your suggestions for Voice Reader Server 15 and this manual are always welcome, and we will make every effort to consider them in the continuing development of our products.

2 System Requirements

Before installing Voice Reader Server 15, please make sure that the system requirements are fulfilled:

- Operating System: Windows Server 2008 (x64, R1, R2) , 2012 (x64, R1, R2), 2016 Windows 7 x64, Windows 8 x64, 8.1 x64 or Windows 10
- Available hard disk space: Up to 2 GB per installed Voice Reader Server 15 language
- Memory: at least 4 GB RAM
- Internet connection for product activation

3 Installation

The installation of Voice Reader Server 15 consists of at least two installations:

- Voice Reader Server 15 server software solution
- Voice Reader Server 15 language data (one installation per language)

The first step is the installation of the server software solution. Then the voice data of each acquired Voice Reader Server 15 language must be installed. For each language a separate installation is required.

Please note that you must be logged in as an administrator to install Voice Reader Server 15. Make sure that installed antivirus programs or the firewall are not blocking any processes required for installation. Before starting the installation, save any open documents and close all applications.

During the installation, either the IP address of the server or its DNS name has to be specified, through which the server is addressed from the web browser or through another application via the network. This input will be named as **[HOSTNAME]** in the further description.

The installation detects and installs automatically the following Microsoft Redistributables:

- Microsoft .NET Framework 4.5
- Microsoft Visual C++ 2005 SP1
- Microsoft Visual C++ 2012

The installation installs and configures, inter alia, the following features and roles:

Web Server IIS

- Application Development
 - ASP.NET
 - .NET Extensibility
 - ASP
 - ISAPI Extension
 - ISAPI Filters
- Application Pool „VoiceReaderServer15“, .NET CLR-Version v4.0.30319
- Windows User „VoiceReaderServer15” in the administrator group.

3.1 Installation from DVD

Insert the Voice Reader Server 15 server software solution DVD into your Server's DVD drive to start the installation. In the event that the installation does not start automatically, execute the **setup.exe** file manually. For example: Locate and open the DVD drive in Windows Explorer, then right-click the file **setup.exe** in the DVD folder. From the context menu, choose the option **Run as administrator**. Follow the instructions on your screen.

Then, insert the Voice Reader Server 15 DVD for the installation of the language data into your DVD drive and proceed analogously as for the server software solution installation.

3.2 Installation by Download

If you obtained Voice Reader Server 15 as a download, please download the links which have been sent to you by your online vendor and save the Voice Reader Server 15 installation files on your server. Please run the installations not until the download is complete. The size of the server installation is about 100 MB. The size of the language data installation depends on the language and can be up to 1.8 GB. Please start with the server installation.

3.3 Installing additional Languages

If you have already installed Voice Reader Server 15 and now wish to add an additional language, simply run the **setup.exe** installation wizard with the new language from the DVD or the downloaded folder. The existing installation will be recognized, and the additional language will be installed.

4 Product Activation

The unlimited use of Voice Reader Server 15 requires the activation of the product using the license keys provided. You obtain one license key for the server installation and one for the language installation. You will find the 25-character license keys on the DVD or the DVD cover. If you purchased a download version, the online vendor will send the license keys to you following completion of the purchase.

Voice Reader Server 15 and the language installation have to be activated with an activation code within 30 days following installation. The activation code is generated during activation using the license key entered and your computer's hardware code.

As long as Voice Reader Server 15 has not been activated, the Activation Wizard will be displayed each time the program is started. Product activation requires an internet connection.

There is a choice of two activation methods.

- **Instant activation:** If the server on which Voice Reader Server 15 has been installed is connected to the Internet, product activation can be performed online within moments.
- **Manual activation:** In the event that instant activation is not possible (e.g. when the server with Voice Reader Server 15 is not connected to the Internet), you can go online from any other PC to retrieve your activation code on the Linguattec activation website, and then manually transfer it to your server.

Important notes on product activation

Since it uses a hardware code, the product activation is connected to the server on which Voice Reader Server 15 is installed. The codes that you receive for activation can therefore be used only on the server from which you have initiated product activation and generated the hardware code.

The product must be reactivated after each reinstallation or reconfiguration of Windows Server.


Reactivation will also be required if you install an additional language for Voice Reader Server 15.

4.1 Instant Activation

Instant activation requires that the server on which Voice Reader Server 15 has been installed is connected to the internet. If this is the case, this is the preferred method of activation, because - apart from the license key - no further codes need to be entered manually, and product activation is completed within moments.

For up to 30 days following installation, you can use Voice Reader Server 15 without activating the product.

Do the following to perform the activation:


1. Start on a PC which has a network connection to the server a web browser and open this URL:
[http://\[HOSTNAME\]/VoiceReaderServer15UI/AdminPage.aspx](http://[HOSTNAME]/VoiceReaderServer15UI/AdminPage.aspx)
2. If necessary, please install the Silverlight Plug in for the web browser.
3. In the user interface of Voice Reader Server 15 please click the button „Product Activation“  and then „**Activate now**“.
4. Please enter your license keys for the server installation and the purchased languages in the corresponding lines in the dialog box „Voice Reader Server 15 – Product Activation“.
5. You will find the license keys on the DVDs. If you purchased Voice Reader Server 15 via download, the online vendor will send the license key to you following completion of the purchase. (If you have not yet received the license key, please contact directly your vendor.)
6. Enter your name and your email address. Make sure that they are entered correctly. This is required to receive support and to take advantage of our update offers.
7. Click on the **Continue** button to move on to the next dialogue box. Under **Activation method**, make sure that the option **Instant activation** is selected. Under **Proxy settings**, leave the default option checked (»Do not use a proxy server«), and click on **Continue** to complete activation.
8. You will receive a message confirming successful activation. You now have unlimited access to Voice Reader Server 15 and its activated language on this server.

In case that the connection to the activation server fails, please perform the **manual activation**.

4.2 Manual Activation

Perform the manual activation if the server on which Voice Reader Server 15 is installed is not connected to the internet, or if the instant activation has failed. Otherwise, instant activation is simpler and faster.

In the case of manual activation, a hardware code must first be generated on the installation server (s. item 5 below). With this hardware code and your license key, you can use any other PC to access the Linguattec activation website (www.linguattec.net/activate) to generate an activation code which must then be entered on the installation server to activate the product. Do the following to perform the activation:

1. Start on a PC which has a network connection to the server a web browser and open this URL:
[http://\[HOSTNAME\]/VoiceReaderServer15UI/AdminPage.aspx](http://[HOSTNAME]/VoiceReaderServer15UI/AdminPage.aspx)
2. If necessary, please install the Silverlight Plug in for the web browser.
3. In the user interface of Voice Reader Server 15 please click the button „Product Activation“  and then „**Activate now**“.
4. Please enter your license keys for the server installation and the purchased languages in the corresponding lines in the dialog box „Voice Reader Server 15 – Product Activation“.
5. You will find the license keys on the DVDs. If you purchased Voice Reader Server 15 via download, the online vendor will send the license key to you following completion of the purchase. (If you have not yet received the license key, please contact directly your vendor.)
6. Enter your name and your email address. Make sure that they are entered correctly. This is required to receive support and to take advantage of our update offers.
7. Click on the **Continue** button to move on to the next dialogue box. Under **Activation method**, make sure that the option **manual activation** is selected and click on **Continue** to complete activation. (Proxy settings are irrelevant for manual activation.)
8. In the following dialogue, the hardware code required for the generation of the activation codes will be displayed next to the program version. Click on the link **Activation form** to open a HTML document containing the license keys you have entered and the hardware code. Either print this form or save it on a mobile data medium (e.g. USB stick). Should neither be possible, please make a note of the hardware code and your license keys.
9. Connect to the Linguattec activation website (www.linguattec.net/activate) from any PC and enter your license keys and the hardware code to generate the activation codes.
10. Either print the form containing the activation codes or make a note of the codes on the print out of the activation form. Please make sure to use exactly the same writing, especially the correct upper and lower case.
11. Return to the **Product activation: Manual activation**. If the dialogue has already been closed, please restart the Voice Reader Server 15 URL to bring up the product activation again. Then repeat the steps as described above.
12. Enter the activation codes received on the activation website into the corresponding fields.
13. Click on the **Continue** button to complete the activation.
14. You will receive a message confirming successful activation. You now have unlimited use of Voice Reader Server 15 on that server.

5 Uninstalling

To uninstall Voice Reader Server 15, use the standard Windows function.

Depending on the Windows server or PC configuration you may need the original installation files on the installation DVD or in your download file.

6 Using Voice Reader Server 15

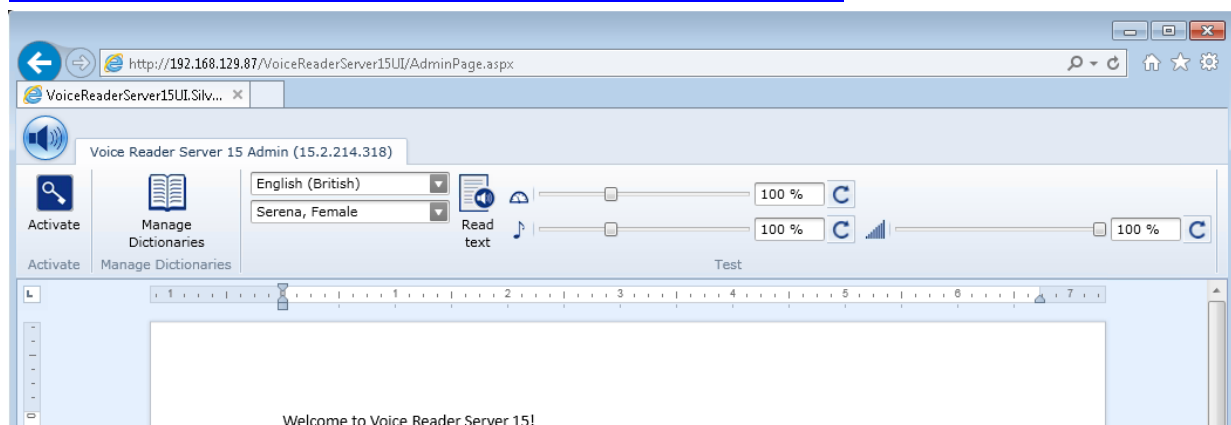
Voice Reader Server 15 offers several web-based interfaces which can be accessed through a web browser or through own programs via web services interface. Examples of programs in Perl, Python and Java can be found in the installation directory on the server after the installation of Voice Reader Server 15.

During installation either the IP address from the server or its DNS name was entered, via which the server can be accessed over the network from a web browser or from own applications. This entry is named in the manual as **[HOSTNAME]**.

6.1 Graphical User Interface

The Silverlight-based graphical user interface of Voice Reader Server 15 provides access to administrative tools such as the activation (“Activate”), the dictionary management (“Manage Dictionaries”) and the simple reading functionality (“Read text”). It can be achieved in any web browser with an installed Silverlight plug-in when using the following URL:

[http://\[HOSTNAME\]/VoiceReaderServer15UI/AdminPage.aspx](http://[HOSTNAME]/VoiceReaderServer15UI/AdminPage.aspx)



You can enter the desired text into the text box. The “Read text” button will start the text-to-speech process for simple reading. In the boxes for language and voice you can choose between the installed components. Use the slider bar to change the settings for speed, pitch or volume. The reset buttons will change the values to default.

A dictionary can be created and maintained via the Windows desktop version of Voice Reader Studio 15. Via the graphical user interface of Voice Reader Server 15 the dictionary may be imported (button "Manage Dictionaries" - "Upload to server"), exported (button "Manage

Dictionaries " - "Download from server"), enabled (button "Manage Dictionaries " - "Activate") or be deactivated (button "Manage Dictionaries" - "Deactivate").

6.2 Interfaces

Voice Reader Server 15 provides the following programming interfaces for direct machine-to-machine interaction:

- HTTP request methods POST and GET
- Web Services: SOAP 1.1 and 1.2
- WCF

6.2.1 HTTP request methods: POST, GET and Web Services

A description and a test option for all methods to the HTTP POST and GET interfaces as well as to the Web Services SOAP 1.1 and 1.2 can be reached from any web browser using the following URL:

[http://\[HOSTNAME\]/VoiceReaderServer15WebService/TtsWebService.asmx](http://[HOSTNAME]/VoiceReaderServer15WebService/TtsWebService.asmx)

Method	Beschreibung
GetInstalledLanguages	Returns a list of all languages which are installed on the server.
GetInstalledVoicesForLanguage	Returns a list of all installed voices for a particular language.
GetSupportedLanguages	Provides a list of supported languages for a multilingual voice.
GetSupportedVoices	Provides a list of all installed voices.
ReadPlainText	Converts a certain plain text into a MP3 audio file.
ReadPlainTextEx	Converts a certain plain text with advanced parameters into a particular audio file. The available parameters and audio file formats are listed in the Appendix under: "Codings for Audio File Formats"
ReadPlainTextWithSubtitles	The same as for ReadPlainText: Converts a certain plain text into a MP3 audio file. In addition to the audio file an eponymous subtitle file is generated. The parameters for the generation of specific subtitle files are listed in the Appendix (chapter 7.3)

	under "Subtitle Formats".
ReadPlainTextWithSubtitlesEx	<p>The same as for ReadPlainTextEx: Converts a certain plain text with advanced parameters into a MP3 audio file. In addition to the audio file an eponymous subtitle file is generated.</p> <p>The parameters and the audio file formats are listed in the Appendix (chapter 7.2.) under "Coding for Audio File Formats".</p> <p>The parameters for the generation of specific subtitle files are listed in the Appendix (chapter 7.3) under "Subtitle Formats".</p>
ReadText	<p>Converts a specific text with Voice Markups into a MP3 audio file.</p> <p>The available Voice Markups are listed in the Appendix (chapter 7.4) under „Voice Markups“.</p>
ReadTextEx	<p>Converts a specific text with Voice Markups and advanced parameters into a MP3 audio file.</p> <p>The parameters and the audio file formats are listed in the Appendix (chapter 7.2.) under "Coding for Audio File Formats".</p> <p>The available Voice Markups are listed in the Appendix (chapter 7.4) under „Voice Markups“.</p>
ReadTextWithSubtitles	<p>The same as ReadText.</p> <p>Generates in addition to the audio file an eponymous subtitle file.</p> <p>The parameters for the generation of specific subtitle files are listed in the Appendix (chapter 7.3) under "Subtitle Formats".</p>
ReadTextWithSubtitlesEx	<p>The same as ReadTextEx.</p> <p>Generates in addition to the audio file an eponymous subtitle file.</p> <p>The parameters and the audio file formats are listed in the Appendix (chapter 7.2.) under "Coding for</p>

	<p>Audio File Formats”.</p> <p>The available Voice Markups are listed in the Appendix (chapter 7.4) under „Voice Markups“.</p>
RemoveFile	Deletes a specific audio file and the associated subtitle file.

Examples of programs in Perl, Python and Java can be found in the installation directory on the server after the installation of Voice Reader Server 15. For the application the variable „urlService“ or „URL_SERVICE“ must be adapted to the corresponding [HOSTNAME].

6.2.2 Windows Communication Foundation (WCF)

The **WCF**-Interface is accessible via the following URL:

[http://\[HOSTNAME\]/VoiceReaderServer15WcfService/TtsWcfService.svc](http://[HOSTNAME]/VoiceReaderServer15WcfService/TtsWcfService.svc)

The **WSDL** document can be opened with this HTTP call in a browser:

[http://\[HOSTNAME\]/VoiceReaderServer15WcfService/TtsWcfService.svc?wsdl](http://[HOSTNAME]/VoiceReaderServer15WcfService/TtsWcfService.svc?wsdl)

With the help of the Service Model Metadata Utility Tool (svcutil.exe) configurations and code files to a particular server can be generated. For further information, look up the following terms on the MSDN page:

- Windows Communication Foundation Tools
- ServiceModel Metadata Utility Tool (Svcutil.exe)
- Generating a WCF Client from Service Metadata

7 Appendix

7.1 Language and Voice Identifier

Any available language of Voice Reader Server 15 has its own coding (**lang**), which can be used as a parameter e.g. in a **Voice Markup** to define the reading language. And also each voice of Voice Reader Server 15 has its own coding (**voice**).

Language	Coding (lang)	Voice
Basque	bae	Miren
Danish	dad	Sara
Danish	dad	Magnus
German	ged	Anna-ML
German	ged	Petra-ML
German	ged	Yannick
German	ged	Markus
English (American)	enu	Ava
English (American)	enu	Samantha
English (American)	enu	Tom
English (American)	enu	Susan
English (American)	enu	Allison
English (Australian)	ena	Karen
English (Australian)	ena	Lee
English (British)	eng	Serena
English (British)	eng	Daniel
English (British)	eng	Kate
English (British)	eng	Oliver
English (Indian)	eni	Veena
English (Irish)	ene	Moira
English (Scottish)	ens	Fiona
English (South African)	enz	Tessa
Finnish	fif	Satu
French	frf	Audrey-ML
French	frf	Aurelie
French	frf	Thomas
French (Canadien)	frc	Amelie
French (Canadien)	frc	Nicolas
French (Canadien)	frc	Chantal
Galician	gle	Carmela
Greek	grg	Melina
Greek	grg	Nikos
Hindi	hii	Lehka
Indonesian	idi	Damayanti
Italian	iti	Alice-ML

Italian	iti	Federica
Italian	iti	Paola
Italian	iti	Luca
Japanese	jpj	Kyoko
Japanese	jpj	Otoya
Cantonese (Hong Kong)	cah	Sin-Ji
Catalan	cae	Montserrat
Catalan	cae	Jordi
Korean	kok	Sora
Mandarin (China)	mnc	Tian-Tian
Mandarin (Taiwan)	mnt	Mei-Jia
Dutch (Netherlands)	dun	Claire
Dutch (Netherlands)	dun	Xander
Dutch (Belgium)	dub	Ellen
Norwegian	non	Nora
Norwegian	non	Henrik
Polish	plp	Ewa
Polish	plp	Zosia
Portuguese	ptp	Catarina
Portuguese	ptp	Joana
Portuguese (Brazilian)	ptb	Luciana
Portuguese (Brazilian)	ptb	Felipe
Romanian	ror	Ioana
Russian	rur	Milena
Russian	rur	Yuri
Russian	rur	Katya
Swedish	sws	Alva
Swedish	sws	Oskar
Swedish	sws	Klara
Slovak	sks	Laura
Spanish	spe	Monica
Spanish	spe	Jorge
Spanish (Colombian)	spc	Soledad
Spanish (Colombian)	spc	Carlos
Spanish (Mexican)	spm	Paulina
Spanish (Mexican)	spm	Angelica
Spanish (Mexican)	spm	Juan
Spanish (Argentine)	spa	Diego
Thai	tht	Kanya
Czech	czc	Iveta
Czech	czc	Zuzana
Turkish	trt	Yelda
Turkish	trt	Cem
Hungarian	huh	Mariska
Valencian	vae	Empar

7.2 Coding for Audio File Formats

7.2.1 Coding for WAV Files (format="wav")

Value (coding)	Description
0	8 KHz, 8 Bit
1	8 KHz, 16 Bit
2	11 KHz, 8 Bit
3	11 KHz, 16 Bit
4	22 KHz, 8 Bit
5	22 KHz, 16 Bit, (Standard)
6	44 KHz, 8 Bit
7	44 KHz, 16 Bit
8	48 KHz, 8 Bit
9	48 KHz, 16 Bit

7.2.2 Coding for MP3 Files (format="mp3")

Value (coding)	Bit Rate
0	16 kB/s
1	24 kB/s
2	32 kB/s
3	40 kB/s
4	48 kB/s
5	56 kB/s
6	64 kB/s (Standard)
7	80 kB/s
8	96 kB/s
9	112 kB/s
10	128 kB/s
11	160 kB/s

7.3 Subtitle Formats

Value (typeSubtitles)	Subtitle Format
0	No file
1	VVT file with sentence segmentation
2	VVT file with word segmentation
3	SRT file with sentence segmentation
4	SRT file with word segmentation

7.4 Voice Markups

Markup	Description and examples
lang	<p>Changes the reading language within a multilingual voice.</p> <p><i><Lang=eng/>Maidstone<Lang=END_eng/></i></p> <p>Coding for the languages: Please see „Language and Voice Identifier“ in the Appendix (chapter 7.1)</p>
voice	<p>Switches the voice. If the voice belongs to a different language, also the language will be changed.</p> <p><i><Voice=Susan/>Please dial “one” for further information.<Voice=END_Susan/><Voice=Petra/>Wenn Sie weitere Informationen wünschen, drücken Sie bitte die „Eins“. <Voice=END_Petra/></i></p> <p>Coding for the voices: Please see „Language and Voice Identifier“ in the Appendix (chapter 7.1)</p>
speed	<p>Changes the speed of the voice output. The default value is 100.</p> <p><i>This is spoken normally, <Speed=90/>and now I’m talking slower,<Speed=END_90/> <Speed=120/>or faster.<Speed=END_120/></i></p>
pitch	<p>Changes the pitch of the voice output. The default value is 100.</p> <p><i><Pitch=80/>lowers the pitch to 80% of the standard pitch <Pitch=END_80/></i></p>
volume	<p>Changes the volume of the voice output. The default value is 100.</p> <p><i><Volume=70/>will read more quietly. <Volume=END_70/></i></p>
pause	<p>Creates a reading pause. The duration of the pause is specified in milliseconds.</p> <p><i>When I am reflecting, <Pause=520/>I make a longer pause.</i></p>