

Technical Notes: NUANCE VOCALIZER 6 OVERVIEW

Vocalizer is a complete engine for delivering spoken output. It provides seamless conversations in over 40 different languages so applications can tell customers anything they need to hear. It handles all the application's audio, from a library of prompt recordings to dynamically generated text-to-speech (TTS) synthesis.

By providing a single source for all audio output, Vocalizer combines computer-generated and prerecorded audio so you can automate more application behaviors, deliver detailed information customized for individual customers, and reduce implementation and operational costs.

Multiform synthesis combines the best of two algorithms--unit (segment) concatenation and model-based--to produce superior speech synthesis. The unit concatenation method assembles the target utterance from fragments of audio sampled from the original speaker.

In Vocalizer for Enterprise, multiform synthesis technology has been improved and extended with natural language understanding to use linguistic features derived from natural language processing. In particular, Vocalizer's text-analysis component predicts part-of-speech, phrase-type, word-prominence level, and prosodic boundary-type tags from input text. As a result, speech synthesis is even more accurate and natural sounding than before.

A brief summary of what's new in version 6 is provided below:

New in Nuance Vocalizer 6

New Features

- Vocalizer for Enterprise has enhanced its multiform synthesis technology with natural language understanding (NLU). The role of natural language understanding is to improve the initial processing of input to achieve improved prosody and naturalness. Support for natural language understanding is implemented only with BET4* voices and is always active. It is not implemented with BET1 voices.
- More languages and voices to offer a better differentiation and cover more geographies; 82 voices and 43 languages
- Advanced syntactic analysis for better modeling of prosody, emphasis and intonation
- Prosody tags for emphasis and speaking styles
- Newest voice building techniques incorporating expressive recordings
- Advanced signal generation and modification capabilities Portfolio
- A wider choice of voices in key countries enables a better differentiation of the solution
- More multilingual voices
- Some voices in Vocalizer for Enterprise have been enhanced with the text analysis CFG4 technology. CFG4 includes some advanced morphological and syntactical analysis, which leads to better speech intonation and rhythm. The result is a more natural and expressive sounding speech. Currently, the voices that support this technology are:
 - Ava (en-US): BET4 (CFG4 with NLU)
 - Ava (en-US): BET1 (CFG4)
 - Petra (de-GE): BET1 (CFG4)
 - Petra-ML (de-GE): BET1 (CFG4)
 - Tian-Tian (zh-CN): BET1 (CFG4)
- Vocalizer for Enterprise supports add-on system dictionaries customized with pronunciation updates. These dictionaries allow a more fine-grained level of control over individual pronunciations, and are an option if a desired pronunciation change cannot be achieved with user dictionaries. They are available for BET1 and BET4 voices. Contact Diagenix if you need a customized system dictionary. You can load these as "hot" updates, without having to stop Vocalizer.
- Vocalizer for Enterprise can extract text from HTML documents letting you listen to articles from your favorite websites. This feature is available with BET1 and BET4 voices. For this feature to work, the text must be enclosed in paragraph tags.

**BET4 voices are not recommended to be used in a real time telephony environment at this time*

Operating system support

This release of Vocalizer has been tested on these operating systems:

- CentOS 5.5 and 5.8 (64-bit)
- Windows 2008 R2 (64-bit)
- Windows 2003 (32-bit)

Installing Nuance Vocalizer for Enterprise

- If you have been using Vocalizer for Network 5.x, uninstall it and all 5.x voices. There is no upgrade from 5.x.
- Install the supported JRE version described in Java software.
- Install only Vocalizer for Enterprise voices. You cannot use 5.x voices.
- Vocalizer for Enterprise requires a new license.

Licensing

- Running Vocalizer for Enterprise requires a license. Contact your Diagenix Sales Representative to obtain a License Authorization Code (LAC), and to obtain instructions for generating and installing the license.

NSS Requirements

- The use of Nuance Speech Server version 6.2.3 and above

Java Requirements

- Vocalizer requires the 32-bit version of Java JRE 1.7.0_13 (7u13) or higher. You must install this before installing Vocalizer. Note the JRE location. The installation program asks for it.

About Diagenix Corporation

Diagenix is an innovative voice application company with over 20 years of industry expertise and knowledge in providing packaged and custom voice applications, servers, tools, and hosted outsourcing services that enable companies of all sizes to quickly and efficiently provide anytime, anywhere, access to information and transactions over the telephone. For more information, visit www.diagenix.com



For more information, visit www.diagenix.com/vocalizer
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