

# REALSPEAK™ TELECOM 4.0

#### **BENEFITS OF REALSPEAK TELECOM 4.0**

- Leverage RealSpeak Telecom 4.0's unmatched portfolio of languages and voices to deliver conversational applications that meet the specific needs of your customers across the globe.
- Delight your customers with powerful applications such as directory assistance, unified messaging, news announcement systems and SMS-to-voice, by taking advantage of RealSpeak Telecom 4.0's bestof-breed text processing and voice quality.
- Drive your brand throughout your voice services with a customized RealSpeak
   Telecom 4.0 voice optimized for your target application areas.
- Communicate rapidly changing content, such as news, weather, account data, and stock prices quickly, easily, and cost-effectively.
- Lower development costs and accelerate time-to-market of conversational applications with RealSpeak Telecom 4.0's application-optimized email and postaladdress processors.
- Reduce development effort by using RealSpeak Telecom 4.0's superior output to replace and blend with recorded prompts.
- Take advantage of standards-based integration into multiple VoiceXML and SALT platforms and high performance and robustness enabling carrier-grade applications.

#### PRODUCT DESCRIPTION

RealSpeak Telecom 4.0 software from Nuance is a text-to-speech (TTS) engine optimized for large-scale deployments of sophisticated telephony applications for the call center, carrier and communications markets. TTS, also known as speech synthesis, takes text as input from a variety of sources—databases, email programs, news reports, Short Message Service (SMS), or other sources—and converts it into natural sounding speech output. RealSpeak Telecom 4.0 is especially well suited for presenting dynamic content including account data, billing addresses, store locations, directions, stock quotes, and weather updates to callers interfacing with an application.

RealSpeak Telecom 4.0 is proven to deliver remarkably natural sounding synthesized speech. As a result, RealSpeak Telecom 4.0 voices can be seamlessly intermixed with pre-recorded audio or used in place of recorded voices. As well as increasing branding and personalization opportunities, this quality enables developers to accelerate development while reducing risks and costs. To maximize the voice quality advantages that RealSpeak Telecom 4.0 provides, Nuance offers a complete service to develop unique, customized voices that can drive your corporate brand across all your voice services—from directory assistance to customer care. From voice brand consulting through project management, voice development, testing, delivery and support, Nuance delivers a comprehensive, timely, affordable, and proven tool to strengthen the corporate image you present to callers.

Built on the impressive capabilities of Nuance's previous marketleading TTS product lines—RealSpeak 3.5 and Speechify® 3.0—RealSpeak Telecom 4.0 offers powerful new features and enhancements that deliver improved accuracy, system density, voice quality, and language coverage. RealSpeak Telecom 4.0 now offers an unparalleled 22 high-quality [DF2] languages and more than 30 voices, enabling the development of TTS applications tailored to localized, multi-lingual, and multi-national markets. Nuance has ensured a seamless upgrade path to protect the investment of existing RealSpeak 3.5 and Speechify 3.0 users.



RealSpeak TTS incorporates the latest techniques for accuracy and naturalness enabling TTS voices to be intermixed seamlessly with pre-recorded audio or used in place of voice recordings across a variety of application environments.

Custom Smart Text-Processing

Output TTS Multiple Language Support

E-mail Pre-Processor Unit-Selection Algorithm

WEO

WEO

The most successful TTS system on the market, RealSpeak Telecom 4.0, has been deployed successfully to drive applications ranging from small point implementations to the largest global carrier solutions in the world. It runs on all major telephony and messaging platforms, giving you the flexibility to select the environment that best suits your company's needs.

RealSpeak Telecom 4.0, is part of Nuance's OpenSpeech Foundation Technologies, a comprehensive set of application-optimized technologies for network speech solutions. Other OpenSpeech Foundation Technologies include OpenSpeech Recognizer engine, SpeechSecure™ verification, and OpenSpeech DialogModules™ components. Together, these products are optimized to deliver a superior caller experience and support open standards in network speech applications.

#### **Language Support**

- US English
- UK English
- Australian English
- Indian English
- North American Spanish
- Castilian Spanish
- German
- European French
- Canadian French
- Netherlands Dutch
- Belgian Dutch (Flemish)

- Danish
- Swedish
- Norwegian
- European Portuguese
- Brazilian Portuguese
- Polish
- Russian
- Japanese
- Cantonese
- Korean
- Mandarin

# SYSTEM REQUIREMENTS

RealSpeak Telecom 4.0 customers can choose from an in-process or client/server implementation. The RealSpeak Telecom 4.0 client and servers run on a wide range of operating systems, including Windows 2000/XP/2003, Linux (RedHat AS 2.1, Enterprise WS 3.0, ES 3.0, AS 3.0, and 7.2), and Solaris Sparc.



RealSpeak Product Family	
Embedded Applications	Network Applications
RealSpeak Solo 4.0	RealSpeak Telecom 4.0

# **Common Components**

Language Identification



Text Normalization E-mail Pre-Processor

Voices and Languages

**Custom Voices** 

RealSpeak Telecom 4.0 offers a wide range of interfaces, including standards-based interfaces such as MRCP, and SAPI, as well as support for RealSpeak Host API and Speechify API.

# **SOLUTION SERVICES**

Nuance Professional Services offers a wide range of solution services to its customers and global partners to help them achieve maximum benefit from their RealSpeak Telecom 4.0 applications. These optional services include:

**Custom Voice Development**—creation of custom voices, which establish a unique voice brand that can be leveraged throughout your corporate voice applications. Nuance's custom voices can be optimized for many dedicated application areas including navigation, virtual characters in electronic games, and directory assistance.

**Porting Services**—porting of RealSpeak Telecom 4.0 applications to customers' dedicated hardware platforms and operating systems.

**Application Tuning**—programming support to tailor RealSpeak Telecom 4.0 application features or performance to meet the needs of specific customers.

# **FEATURES/BENEFITS**

#### The Most Natural Speech Output Available

RealSpeak Telecom 4.0 uses concatentative synthesis techniques, which means that it selects small segments of recorded speech from a database, and joins them together to create the output speech. Through its use of human speech, intelligent unit-selection algorithms, and unique front-end processing capabilities, RealSpeak Telecom 4.0 is able to produce clear, intelligible, natural sounding speech. As a result, your callers experience voices that are consistently pleasant, warm, and friendly.

#### **Multiple Language Support**

Nuance is committed to enabling delivery of best-of-breed conversational applications throughout the world. Supporting 22 languages and over 30 voices, RealSpeak Telecom 4.0 enables your company to deploy conversational applications across many countries, and even supports multiple languages



within a single application. Voices with bilingual capabilities are also available in product and custom voices.

#### Language Identifier

To further improve your deployment of TTS languages, RealSpeak Telecom 4.0 delivers a language identifier—currently available for 11 Western languages—that enables your application to automatically select the best language engine based on its analysis of the text input.

# **Custom Voice Availability**

Thanks to our efficient voice-building process, Nuance can rapidly produce a high-quality custom TTS voice for your RealSpeak Telecom 4.0 application. Nuance has extensive experience and expertise in creating domain-specific custom voices that have enabled customers across the globe to enhance their own unique voice brand. Your custom voice can be based on any voice you select and can be optimized to suit your specific target application.

#### **Smart Text Handling**

Powerful front-end processing enables intelligent handling of ambiguous text input, numbers, or abbreviations (examples: Dr., St. or WHO), resulting in more accurate speech output. In addition, developers can easily insert tags to create pauses, customize word pronunciations, or specify the interpretation of certain numeric sequences to achieve more intelligible speech output. In addition, RealSpeak Telecom 4.0 intelligently processes MIME and RFC822 emails in all supported languages to read the essential information to recipients in a pleasant and easy-to-understand manner.

# Multiple, Layered Dictionaries

For increased accuracy and quality, RealSpeak Telecom 4.0 allows developers to customize TTS output for specific business and application tasks using dictionaries that can be populated with application-specific words and pronunciations. RealSpeak Telecom 4.0 comes with an intuitive user dictionary

editor allowing application developers to customize and maintain their own dictionaries.

#### **High Performance**

RealSpeak Telecom 4.0 delivers superior quality together with excellent hardware scalability and robustness for meeting the demands of even the largest carrier and network deployments in a highly cost efficient manner.

#### **Easy Deployment**

RealSpeak Telecom 4.0 supports a number of APIs, including the RealSpeak Host API, the Speechify API, MRCP (available through the Nuance Media Server), and SAPI 5, to maximize deployment options for new customers and to provide backward compatibility for existing RealSpeak and Speechify users. Your company can take advantage of a standards-based integration of RealSpeak Telecom 4.0 into VoiceXML or SALT platforms. Full support for the <audio> tag in SSML enables seamless mixing of recorded audio and TTS within a single application.

All OpenSpeech Foundation Technologies are integrated in the Nuance Media Server under a single standardized MRCP interface framework to provide optimal support for building best-of-breed conversational applications.

### **ABOUT NUANCE COMMUNICATIONS, INC.**

Nuance is the leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications, and services make the user experience more compelling by transforming the way people interact with information and how they create, share, and use documents. Every day, millions of users and thousands of businesses experience Nuance's proven applications and professional services. For more information, please visit nuance.com.

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