

More range thanks to dubbed knowledge contents

Bibliographisches Institut & F. A. Brockhaus AG

Brockhaus can now be heard as well

Anyone who values serious information always looks up the information when he/she is in doubt. Here, you are being doubly clever by looking to Brockhaus: On the one hand, you can depend on the renowned reliable content of the Brockhaus editors; on the other hand, Brockhaus multimedia offers an electronic version which is actually fun thanks to its many multimedia elements.

As a leading German lexicon, Brockhaus multimedia has come out top for some years now in countless comparison tests and has received many prestigious awards, e.g. Giga-Maus (1999-2007) and digita (2005, 2007, 2009) - the German training software prize. Brockhaus multimedia also scored points when it was selected as the software of the year in 2007 in the category "Hobbies & Recreation" by users of the download portal Softwareload.

The contents are just as impressive: more than 260,000 articles with over 330,000 keywords supplemented by a number of animations, videos, 360° panoramas, interactive city tours, active photos and much more. Other highlights include the 3D atlas, the planetarium with over 120,000 heavenly bodies and the glass "Anima". With the **MP3 function**, all articles in the current version Brockhaus multimedia premium 2009 can even be stored so that they can be replayed on any MP3 player.

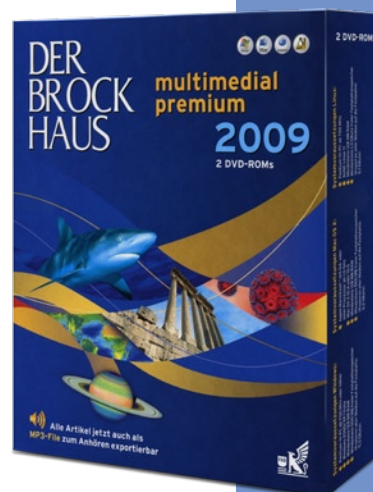
The task: convert text to speech

More and more people have their MP3 players on them all the time – what would be more practical than being able to take the Brockhaus multimedia with you everywhere you go as well. To realize this vision, an interface to MP3 players was integrated into the electronic lexicon. The texts were converted to audio files – and a lexicon with several hundreds of thousands of articles presented a particular challenge.

Due to the massive volume of text, having the entire text dubbed in a recording studio by human speakers was out of the question: First of all, this would hardly have been feasible due to time and logistic constraints; and secondly it would have dramatically increased the price of the product," explains Martin Koch, Head of Content & Learning. "The solution was a simple text-to-speech system." The solution: Linguattec Voice Reader

Of course the Brockhaus publishing house had looked at various text-to-speech programs – or better: listened to them – before deciding to go for Voice Reader. "As market leader in this segment, Voice Reader is the most suited to our brand," Martin Koch comments on the decision.

Of course, without preparation, the texts couldn't be converted to MP3 files: After a few test runs with selected text samples, the text corpus was adjusted accordingly to ensure that there were no



Requirements on the desired dubbing software:

- good pronunciation and natural emphasis for good audibility
- simple and fast generation of audio files simple pronunciation correction excellent tone quality





problems with abbreviations or symbols like * (birth) or † (death). The subsequent conversion was automated as much as possible.

In all, Voice Reader generated roughly 35 gigabytes of audio files. A small number are delivered directly with the DVD version of Brockhaus multimedia premium 2009, with the entire collection of MP3 files being available to download online for Brockhaus users. The outlook: enhanced quality thanks to Voice Reader Studio

"The idea to provide the lexicon articles in MP3 format for mobile use was welcomed by users like the trade press."

Martin Koch, Head of Content & Learning

Along with its efficiency and ability to dub even large volumes of data, Voice Reader shows its performance capabilities through other practical features. Voice Reader Studio enables the dictionary to be processed in a targeted manner and thus facilitate the pronunciation of unknown words or adjustment of the virtual speaker's voice and/or speed. With the aid of special commands integrated directly into the text, Voice Reader Studio also enables speech output to be dynamized by using several different speakers or adding conversation lulls.

"The idea to provide the lexicon articles in MP3 format for mobile use was welcomed by users like the trade press," Martin Koch reports on the positive feedback to the new feature of Brockhaus multimedia premium 2009. An important aspect for the up-to-dateness of Brockhaus is the free update service. The owners of Brockhaus multimedia can download new and up-to-date online articles free of charge every month – and this also includes audio files of course. "We want to offer optimal service to our users. With Voice Reader Studio, this continuous further development is also possible - quickly and smoothly - in the usual quality." And what's more, in several languages! At Brockhaus, there is a clear trend towards increased mobility and stronger audio use, so that other applications of text-to-speech technology can also be considered, e.g. providing newsletters as podcasts.

Linguatec is a leading provider of language technology. Key areas are automatic translation, language recognition and speech output. Linguatec offers software ranging from desktop solutions to comprehensive solutions for multilingual corporate communication in internal company networks.

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References:



Further application areas can be found on our website: www.linguatec.net.

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