

## Free Format Voice-controlled Media Player

With the proliferation of Giga-bit discs for media content, particularly music, an individual may carry thousands of songs on his/her portable music repository. This raises two challenges:

1. How do you navigate among thousands of songs?
2. How do you categorize thousands of songs so that they can be easily retrieved?

Dialogue Technologies have a solution to both these challenges. Users can control their media player and select the music to play by issuing free-format voice commands. Commands like *"Play country songs from the sixties"* and *"Play the album Ray of Light with Madonna"* take user friendliness to a new level.

Dialogue Technologies uses leading-edge natural language technology in combination with modern database technology.

The digital music industry has seen a boom the last few years with compression techniques like mp3 and transport over the Internet. A market for portable digital music players has grown. At the same time storage technology has made it possible to store thousands of music files on portable devices with small hard drives.

Advances in user interface technology have not progressed at the same rate, however, leaving users to browse through thousands of titles with few control buttons and miniscule screens.



### Categorizing media files

Most media files contain meta data about the contents of the file in so-called ID3 tags. The meta data holds information about artist, name of the song, album, release date, genre of music, etc. Dialogue Technologies' *Free Format Voice-controlled Media Player* extracts this information and stores it in a small relational database.

Song	Artist	Album	Rating	Genre	Link	Publisher	Composer	Release date	Mood
jamming	bob marley	legend	4	reggae	c:\music\bob marley - legend\14 - jamming.mp3	island	bob marley	2002-01-02	upbeat
is this love	bob marley	legend	3	reggae	c:\music\bob marley - legend\01 - is this love.mp3	polygram	bob marley	1984-01-02	upbeat
three little birds	bob marley	legend	2	reggae	c:\music\bob marley - legend\04 - three little birds.mp3	polygram	bob marley	1984-01-02	upbeat
buffalo soldier	bob marley	legend	3	reggae	c:\music\bob marley - legend\05 - buffalo soldier.mp3	polygram	bob marley	1984-01-02	upbeat
redemption song	bob marley	legend	3	reggae	c:\music\bob marley - legend\11 - redemption song.mp3	polygram	bob marley	1984-01-02	sad
exodus	bob marley	legend	3	reggae	c:\music\bob marley - legend\13 - exodus.mp3	polygram	bob marley	1984-01-02	upbeat
jolene	dolly parton	greatest hits	5	country	c:\music\dolly parton - greatest hits\01 - dolly_parton-jolene-ssr.mp3	bmj international	dolly parton	2003-01-02	sad
9 to 5	dolly parton	greatest hits	3	country	c:\music\dolly parton - greatest hits\09 - dolly_parton-9_to_5-ssr.mp3	bmj international	dolly parton	2003-01-02	upbeat
help the poor	b.b. king	riding with the king	3	blues	c:\music\bb. king & eric clapton - riding w th the king\06 - help the poor.mp3	warner brothers	charlie singleton	2000-01-02	sad
i wanna be	b.b. king	riding with the king	3	blues	c:\music\bb. king & eric clapton - riding w th the king\07 - i wanna be.mp3	warner brothers	charlie sexton	2000-01-02	upbeat

The *Free Format Voice-controlled Media Player* can also retrieve additional information about the media files from the Internet.

### Selecting from your music

With Dialogue Technologies Q&A products the user can now issue voice commands to select the music he or she wants to listen to. Commands like *"Play all albums with Rolling Stones from the sixties"* or *"Play a romantic song with Aretha Franklin"* are translated to SQL queries, compiling play lists from the database. The use of SQL and Dialogue Technologies allows you to access the full power of modern database technology using your own voice and words - the most intuitive and natural of all user interfaces!

Play a blues album with BB King from the sixties.

*Free Format Voice-controlled Media Player* can be implemented on a small, hand-held PC. The PC can run all required software and will have ample space for music and video.

## Product Overview

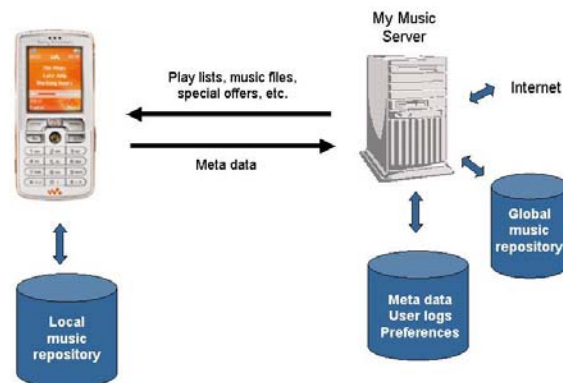
The *Free Format Voice-controlled Media Player* can be used in two different configurations, device resident or network resident.

### Device resident configuration

In the device resident configuration all software necessary reside on a device with a media player, e.g. an mp3 player like iPod, or a mobile phone. The application is used locally to control the player and manage the users music files.

### Network resident configuration

In the network resident configuration the media files reside on the device itself or on a server on the network. A small application extracts the meta data from media files on the device and sends that to a personal server where the database is built.



The user can now start to generate play lists from the server by issuing voice commands. In the network configuration service providers can manage the users' music files and use the logging function in Q&A Professional to collect information about user preferences. This information can be used to tailor customer specific offerings. The user can benefit from being able to search larger music databases and download selected songs.

## Characteristics

- Support for English, Swedish, and German. Spanish, Italian, French, and Danish in development.
- Works with most voice recognition systems.
- Web-based development and maintenance tools.
- Extensive documentation and test tools.
- Programming language is Java with a Prolog plugin.
- Accepts the vast majority of all ways of formulating a question.
- Logging facility monitoring all user queries and user behaviour.
- Web-based tool for user log analysis.

## System requirements

Q&A Professional  
 OS: Linux or Windows (can be ported)  
 CPU: 250 MHz, or more  
 Memory: 128 MB RAM  
 Storage: 5 MB

## Background

Dialogue Technologies AB (priv.) was founded 2001 to capitalize on years of world class research and development. The company excels in natural language solutions for consumer applications.

Dialogue Technologies is located in Kista, with a branch office in Heidelberg, Germany.

## Contact us

Dialogue Technologies AB  
 Skalholtsgatan 10 B  
 SE-164 40 Kista

+46 8 632 06 30

www.dialoguetech.com  
 info@dialoguetech.com

