

PresVoz

Generating Presentations with Voice

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19.12.2021

<https://www.iraccoonshow.tk>

1 What is PresVoz?

PresVoz is a ConT_EXt LMTX—<https://www.pragma-ade.com/install.htm>—module that allows to mix slides and sound, including transition times. It generates a single PDF document with playing buttons.

The reasoning behind *PresVoz* is to have the best possible quality in the slides, voice with reasonable quality, automatic slide transitions and minimal output size.

Just in case you might wonder, *PresVoz* name comes from the Spanish *presentaciones con voz*—“presentations with voice”.

2 Acknowledgments

The main *JavaScript* contribution for the PDF generation comes from Michal Vlasák. I really indebted to him for his huge generosity and readiness to help.

ActionScript for the *Flash* presentations comes originally from Leonard Lin and Sergio Costas.

Besides them, I couldn't generate this module without the help of Hans Hagen, by replying the questions I posted on the mailing list for ConT_EXt users.

3 Requirements

Since the presentations rely on *JavaScript* for slide transitions, *Acrobat* is required. Its latest version is recommended.

Although you can generate the presentations on any OS that runs ConT_EXt, only *Acrobat DC* can play these presentations—using OS multimedia resources. Since *QuickTime* seems not to be reporting sound position to *Acrobat*, the resulting presentations won't work in *macOS*.

LAME is required to convert WAV sound files to MP3 files automatically¹. *PresVoz* can also generate *Flash* presentations—see 10. *Flash Presentations*.

¹ <https://lame.sourceforge.io/>. Windows binaries are available at <https://www.rarewares.org/mp3-lame-bundle.php>. *Homebrew*—<https://brew.sh/>—has binaries for *macOS*. *TwoLAME*—<https://www.twolame.org/>—doesn't work here, since it outputs MP3 files with wrong duration information.

4 Input Requirements

To generate the presentations with voice, you must have on the same directory²:

1. The original slides in PDF format.

It isn't required that the PDF document had been created with ConT_EXt.

2. Sound file with voice in MP3 format.

If there is an uncompressed WAV file and LAME is installed on your computer, *PresVoz* will generate the MP3 file.

PresVoz will only generate the MP3 file if there is none available. Being both MP3 and WAV given, MP3 is used.

3. A pure text file with timeline. Times should be in milliseconds, such as in:

```
599
1049
1526
2031
2494
2876
3404
3903
4338
4845
```

There is a *Python* script that records audio and times, while displaying the slides and generating sound and timeline files³.

5 Naming Conventions

Files should be named in the following way:

- 2 *PresVoz* expects these three files are in the same directory. If they aren't, please generate symbolic links as required to have these three files in the same directory.
- 3 *GVoz* —<https://gvoz.iraccoonshow.tk>— is still for my personal use only. It will be released as soon as possible.

1. Main PDF document with slides, with any given name: `document.pdf`.
2. Sound file, with the following naming structure: `document-audio.mp3`, `document-audio.wav`.
3. Timeline file has to be named so: `document-times.txt`

Sound files add `-audio.mp3` or `-audio.wav` to the PDF document name.
Timeline adds `-times.txt` to the main document name.

6 Invocation

Invocation is simple:

```
context --extra=third-PresVoz document-filename.pdf
```

I'd rather suggest to add `--purgeall` to remove extra files.

Both `document-times.js`⁴ and `document-audio.mp3` cannot be removed automatically. Otherwise, they won't be embedded in the final PDF document.

7 Easier Invocation⁵

If you run *Windows*, follow these steps:

1. Open a pure text file and type:



```
context --purgeall --extra=third-presvoz "%~1"
```

2. Give the resulting file a meaningful name, such as `presvoz.bat`.

I'd rather save it on the desktop, but place it wherever you think it will be accesible.

3. After that, you might drag and drop the PDF presentation⁶ and *PresVoz* will generate everything automatically.

In case you happen to run *Linux*⁷:

⁴ This is one of the files *PresVoz* generates, not one of the source files—`document-times.txt`.

⁵ On both cases, the path to ConTeXt binaries must be known to the system.

⁶ Given that 4. *Input Requirements* are met.

⁷ Something similar should apply to *macOS*.

1. Type in a pure text file:



```
context --purgeall --extra=third-presvoz "$1"
```

2. You might want to name this file to presvoz.

3. Give execution permissions to that file, such as in:



```
chmod u+x presvoz
```

4. Move the file to your local ~/bin/ directory.

After that, you could invoke in any terminal⁸:

```
presvoz document.pdf
```

Everything will run automatically after that.

8 Issues

If you experience an issue with *PresVoz*, please report it at <https://gitlab.com/ousia/context-presvoz/-/issues/new>.

The single already known issue is that most of the times the presentation goes back to the second last page, after the main sound file is completely played. This is an issue in the *JavaScript* code and I don't know how to fix it.

9 Technical Issues

Multimedia handling in PDF documents is still something to be specified in PDF version 2.0.

RichMedia might be the right approach to multimedia in PDF 2.0. But that documentation has to be written.

The same applies for *JavaScript* in PDF. And they will be behind the ISO paywalls, so its availability will be very limited.

⁸ Of course, nothing prevents from having a drag-and-drop option as in *Windows*. But I don't use them in Linux and I never tried to do it.

10 Flash Presentations

As a goodie, if you have *SWFTools*—<http://www.swftools.org>—installed⁹, it will generate a *Flash* version of this presentation with voice.

Ruffle—<https://ruffle.rs>—allows to play *Flash* files. It delivers desktop programs for *Windows*, *macOS* and *Linux*, and extensions for *Firefox*, *Chrome* and to self host on a server.

PresVoz presentations play pretty well with the current version of *Ruffle*. After all, these presentations are basic animations. But if you find a bug in *Ruffle*, please report it to the developers—<https://github.com/ruffle-rs/ruffle/issues/new>.

⁹ At least, *pdf2swf* and *swfc*. *Windows* binaries are available at <http://www.swftools.org/download.html>. *Homebrew* has binaries for *macOS*.