IMSC Open Source Projects

How to combine different Open Source Caption Tools

FOSDEM´20

Andreas Tai, Institut für Rundfunktechnik (IRT)

PROLOG


IMSC
WebVTT
SRT

SRT

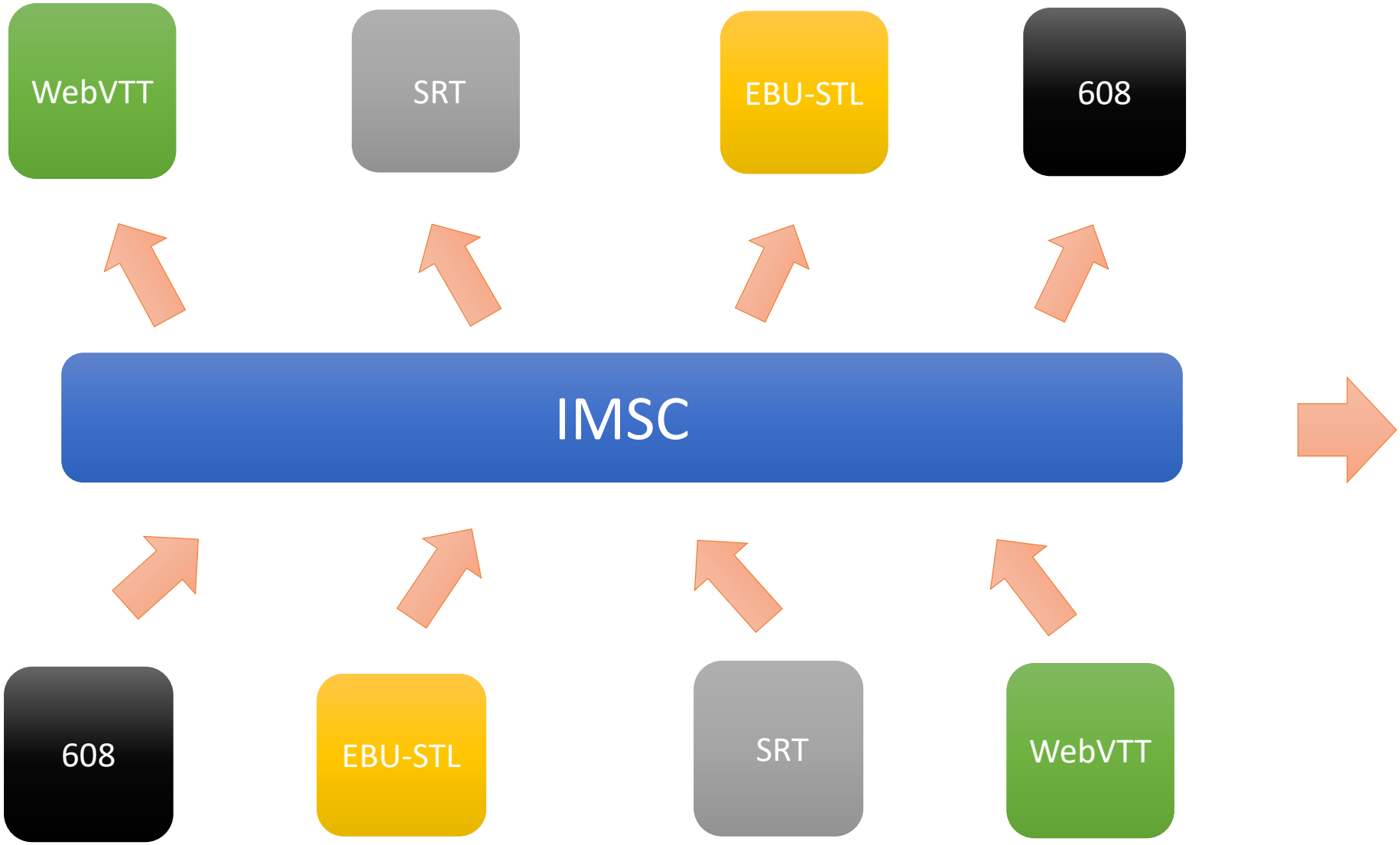
```
1
00:00:01,000 --> 00:00:02,000
Hello World
```

WebVTT

```
00:00:01.000 --> 00:00:02.000 align: right
Hello World
```

IMSC

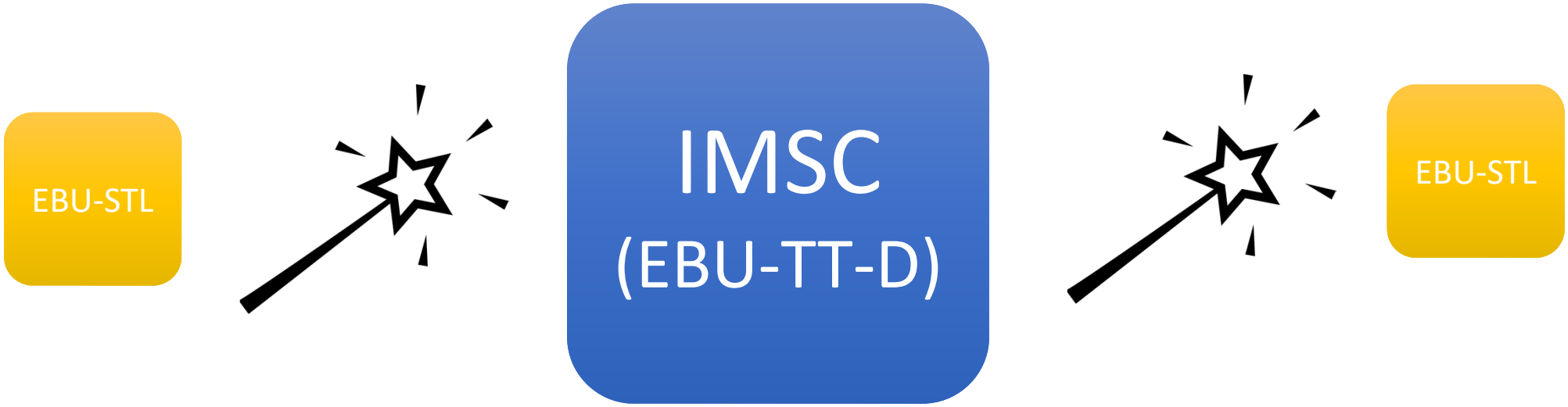
```
<p begin="00:00:01" end="00:00:02">
   Hello World
</p>
```


WebVTT
SRT
EBU-STL
608
IMSC
608
EBU-STL
SRT
WebVTT

COMBINING IMSC MECHA

EBU-
STL

Subtitling Conversion Framework



Subtitling Conversion Framework

Technologies

- XSLT
- Xquery
- Python

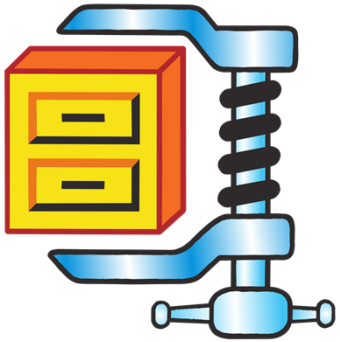
REST API

- BaseX Server
- Docker

github.com/IRT-Open-Source/scf


Open
Captions

Video Image Burner



+

PNG

Video

Video Image Burner

Technologies

- ffmpeg

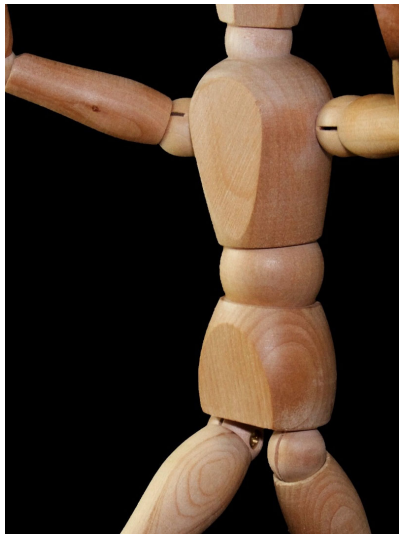
REST API

- BaseX Server
- Docker

github.com/IRT-Open-Source/vib

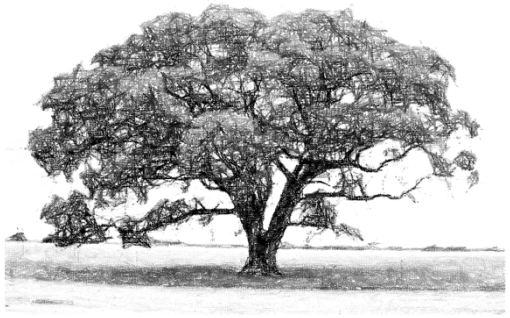
IMSC

Parsing &
Rendering



imscJS

```
−<tt xml:lang="jp" ttp:contentProfiles="http://www.w3.c
  −<head>
    −<metadata>
       <ttm:desc>Basic ruby text</ttm:desc>
     </metadata>
    −<layout>
       <region tts:displayAlign="center" tts:textAlign=
       20%" tts:extent="40% 40%"/>
     </layout>
  </head>
 −<body>
   −<div>
     −<p region="r1" begin="2s" end="10s">
       −<span tts:ruby="container">
          <span tts:ruby="base">利用許諾</span>
          <span tts:ruby="text">ライセンス</span>
        </span>
      </p>
    </div>
  </body>
</tt>
```



XML

Javascript

HTML DOM

imscJS

Technologies

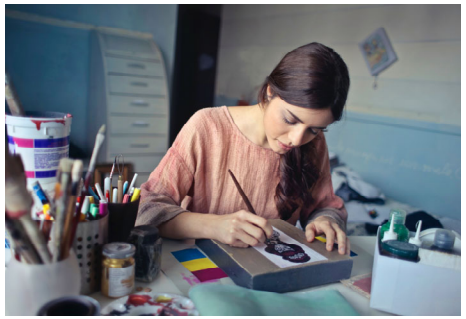
- Javascript

github.com/sandflow/imscJS

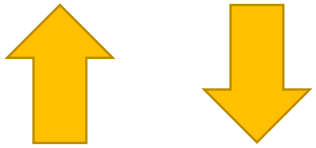
IMSC

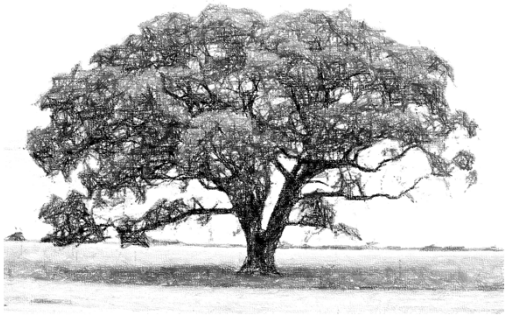
Editing

imscEd



User interface





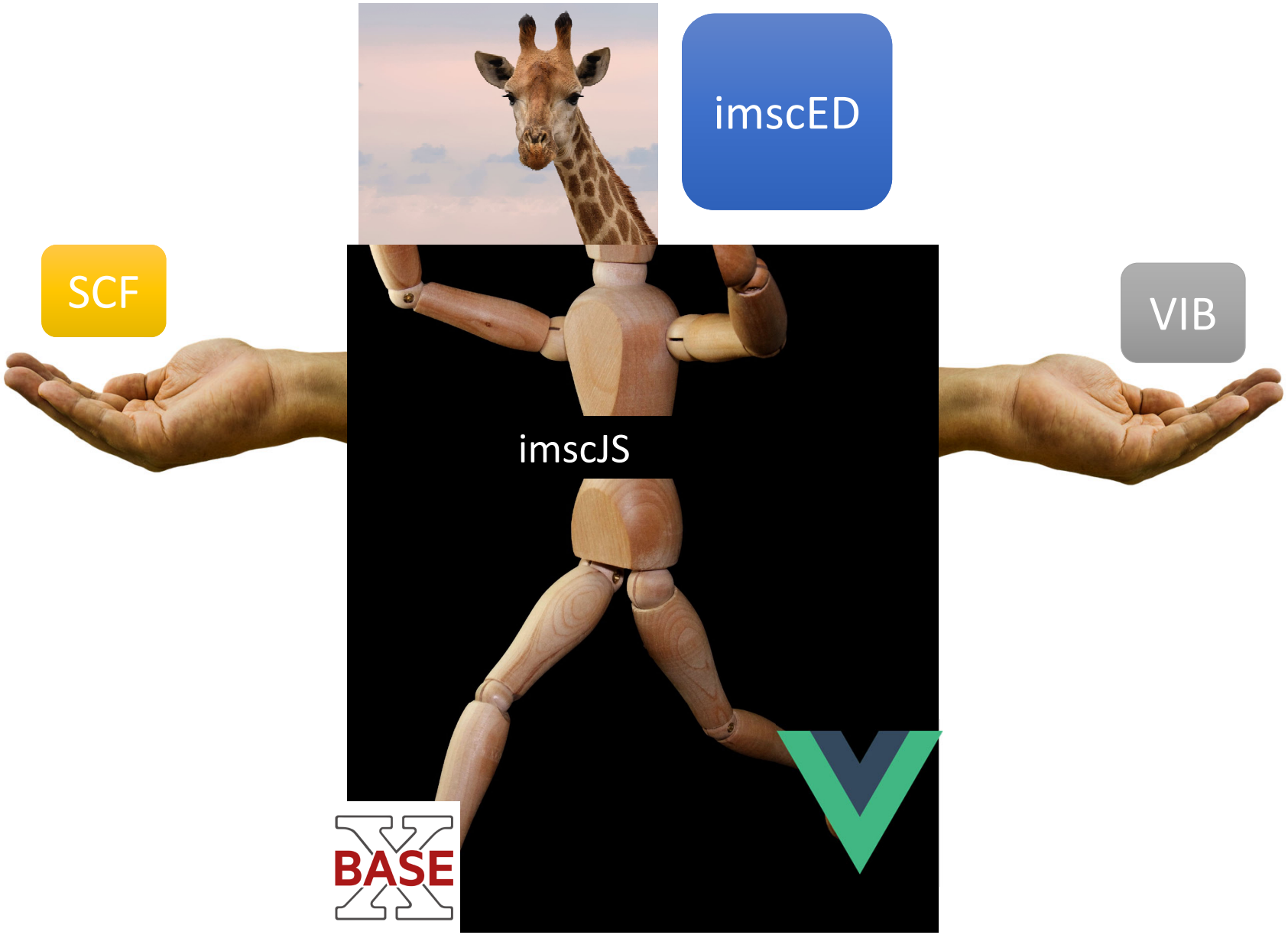
IMSC Javascript Object

imscEd

Technologies

- Javascript
- vue.js

github.com/IRT-Open-Source/imsced


imscED
SCF
VIB
imscJS
BASE

References

- github.com/IRT-Open-Source/vue.js
- github.com/IRT-Open-Source/basex

References

- github.com/IRT-Open-Source/scf
- github.com/IRT-Open-Source/vib
- github.com/sandflow/imscJS
- github.com/IRT-Open-Source/imsced
- subtitling.irt.de/imsced (latest build)

Aknowledgement

Laura Ehlis (imscEd), Michaela Finger (imscEd), Pierre Lemieux (imscJS), Yury Lugantsov (imscEd), Stefan Pöschel (SCF, VIB)

Parts of imscED were developed in the project dwerft - linked metadata for media (www.dwerft.de).

dwerft - linked metadata for media is a research and development project for innovative media tech solutions by different media and IT companies located at the renowned area of Babelsberg.

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Experts in audio-visual media

Andreas Tai
Project Manager Accessibility
Floriansmuehlstraße 60

80939 Munich
Tel +49 89 323 99 – 0
FAX +49 89 323 99 – 351
www.irt.de
tai@irt.de