

Dedicated to Edith and Tove.

The Island of T_EX in 2020

A year in review, living on an island

Paulo Cereda

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TUG 2021

A new adventure unfolds

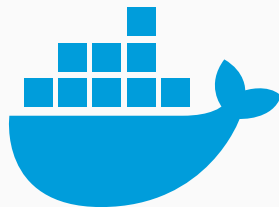


2020: an eventful year...



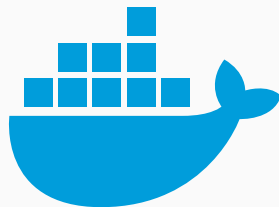
Docker images

Docker images



- T_EX Live + required tools to run included software
- Releases from 2014 to current (historic and latest)
- All images from latest are rebuilt weekly

Docker images



We now also manage the Docker Hub images at:

<https://hub.docker.com/r/textlive/textlive>



TeXdoc online



- A successor to T_EXdoc.net (which now redirects)
- New frontend + RESTful API with several endpoints
- Self-hosting your own instance is straightforward
- Dockerized image with automatic daily updates



Software is running at (courtesy of Stefan Kottwitz):

<https://texdoc.org>



Albatross



- Tool for finding fonts that contain a given Unicode glyph
- It takes a list of glyphs, separated by spaces, as input
- Two formats: the glyph itself or the Unicode code point



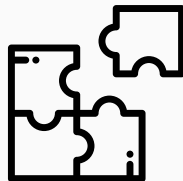
Example

```
1 $ albatross 0xDF --show-styles --detailed
```

Albatross will list all fonts containing ß (Eszett), including styles available for each font, as well as type and path.



checkcites



- Tool for checking missing or unused references
- Migrated from Paulo's repository to the island
- Currently being rewritten from Lua to Kotlin (WIP)
- Transitioned from monolithic to modular (also WIP)





Ultimate goal for our
Bib \TeX parser (Kotlin MPP)

Targets



JVM



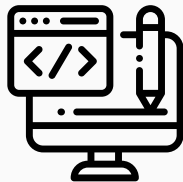
Native



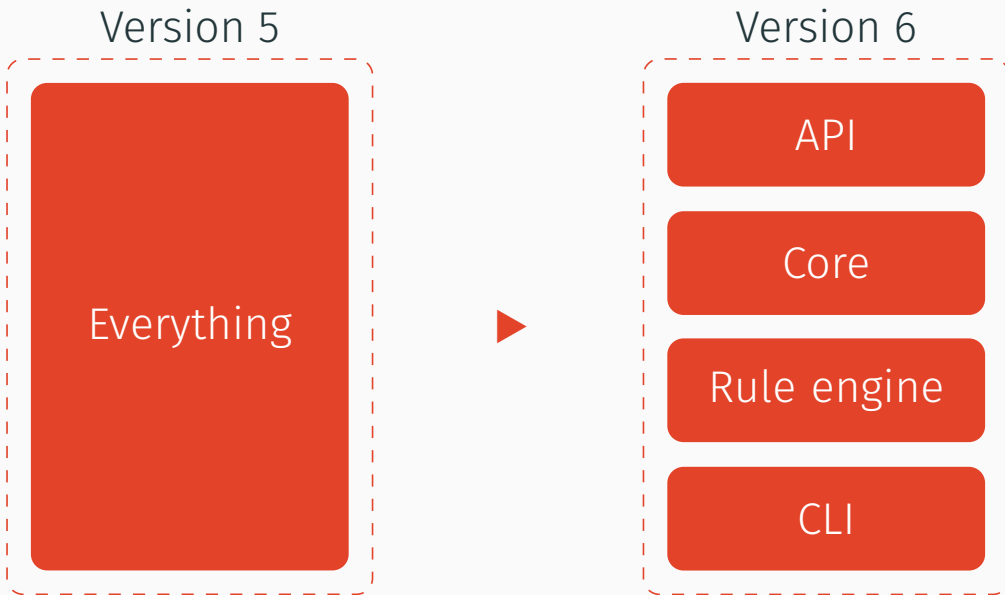
JS



arara



- Major rewrite for version 5 (from Java to Kotlin)
- Release schedule aligned with T_EX Live (pretest)
- Transitioned from monolithic to modular (version 6)
- Enhanced feature set + optimized workflow (version 6)



Preambles

- More configurable (check whether directives are given)
- Set a preamble as default (if no directives are given)

The tool can be set as the default compiler in your editor and you can even compile before having inserted any directive.

Passing command line parameters

- A straightforward way to communicate with rules and directives
- Support for multiple key/value pairs, stored in the session map
- Can be used to blueprint configurable automated builds

Example

```
1 $ arara -P key1=value1 -P key2=value2 file.tex
```

Example

```
1 getSession().get("arg:key1") // value1  
2 getSession().get("arg:key2") // value2
```

Environment variables are also available in the session map through the corresponding namespace.

Expansion within directives

- Support for session, reference and base name
- Restricted to list elements from the `options` key

Example

```
1 % arara: pdflatex: { options: [ "-jobname=@{  
2     getSession().get('arg:output') }" ] }
```

Safe mode

- File lookup is limited to a exact match only (no patterns)
- Unsafe executions raise an exception and abort the run
- Expansion within directives is disabled (literal values)

Example

```
1 $ arara --safe-run file.tex
```


Rule improvements

- The `default` key now behaves as user input (no more expansions)
- The `flag` key now returns a list of strings (for type consistency)
- The shorthand notation deprecated in version 5 has been removed

Rules included in the core distribution have been renamed to have a unique prefix in the `texmf` tree.

Documentation

- Quick start guide for new users (featuring Peter, the anteater)
- The user documentation was renamed to reference manual
- New landing page with updates and release notes



New landing page at:

<https://islandoftex.gitlab.io/arara>



Ultimate goal for future
versions of **arara** (Kotlin MPP)

Targets



JVM



Native



JS

Exploring new grounds

- Cleaner logs + granularity switch
- New DSL-based approach for rules
- Support for projects + dependencies
- Better integration with existing workflows

To be continued...



The future

Long-term goals

- Support improvement for our tools
- Stabilization of our current projects
- Implementation of modular components

Challenges

- Hardware limitations for development and testing
- OS-related issues are handled through voluntary testing
- No documentation team working together with development
- Limited number of active developers and contributors

*We kindly ask the community
for help, in any way possible.*

*And thanks for the
patience with us. ❤️*

Final remarks



- Vibrant environment for the development of \TeX -related tools
- We want to enhance the user experience, from newbie to expert
- Use and diffusion of modern methodologies and technologies

The Island of T_EX is hosted at:



<https://gitlab.com/islandoftex>

Cheerio!



Paulo Cereda