

SYNCTEX

What is SYNCTEX

Disclaimer

What we do

How it works

What the user gets

CONTEXT 2017 Maibach

- it is a mechanism for going back from viewer to editor
- it uses an extra (zipped) output file
- it adds an overhead of 5 to 15 percent runtime
- it is designed with a specific macro package in mind
- the rather generic approach works okay for simple document layouts
- but it often fails for projects that use multiple files
- and that moves information around like XML encoded files

What is SYNCTEX

- till recently it was supported in CONTEXT as-it-was
- there were no compliants, so it must have worked ok for most users
- we never used it ourselves because of mentioned reasons
- we only wanted to support it when it works ok in projects
- (think of thousands of XML with deeply nested inclusions in one document)
- but what we support now is purely based on personal experiences
- we don't use it ourselves so feedback is welcome

Disclaimer

- the normal SYNCTEX mechanism is disabled
- when told so, CONTEXT will kick in its own code
- this is done by using LUA code to set the right information
- only source files that make sense are dealt with
- this protects the styles from unwanted changes
- within reasonable bounds XML is supported
- this also includes nested documents

What we do

- we only mark text and don't bother about the rest
- we collapse information about whole stretches
- the extra file is therefore not that large
- so we can do without compression
- some care is needed to avoid interference with the editors parser
- (read: we need to get rid of the rather complex and heuristics)
- (read: it would be nice to have a simple robust parser option)
- there are flaws but I will look into them when motivated

How it works

- a way to turn it on:

```
\setupsynctex[state=start]
```

- control over methods:

```
\setupsynctex[method=max]
```

- visual tracing:

```
\enabletrackers[system.synctex.visualize]
```

- some low level commands:

```
\synctexblockfilename{filename}
```

```
\synctexsetfilename {filename}
```

```
\synctexresetfilename
```

```
\synctexpause
```

```
\synctexresume
```

What the user gets