

Asynchronicity—Improvements in Online

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Technical Day
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days





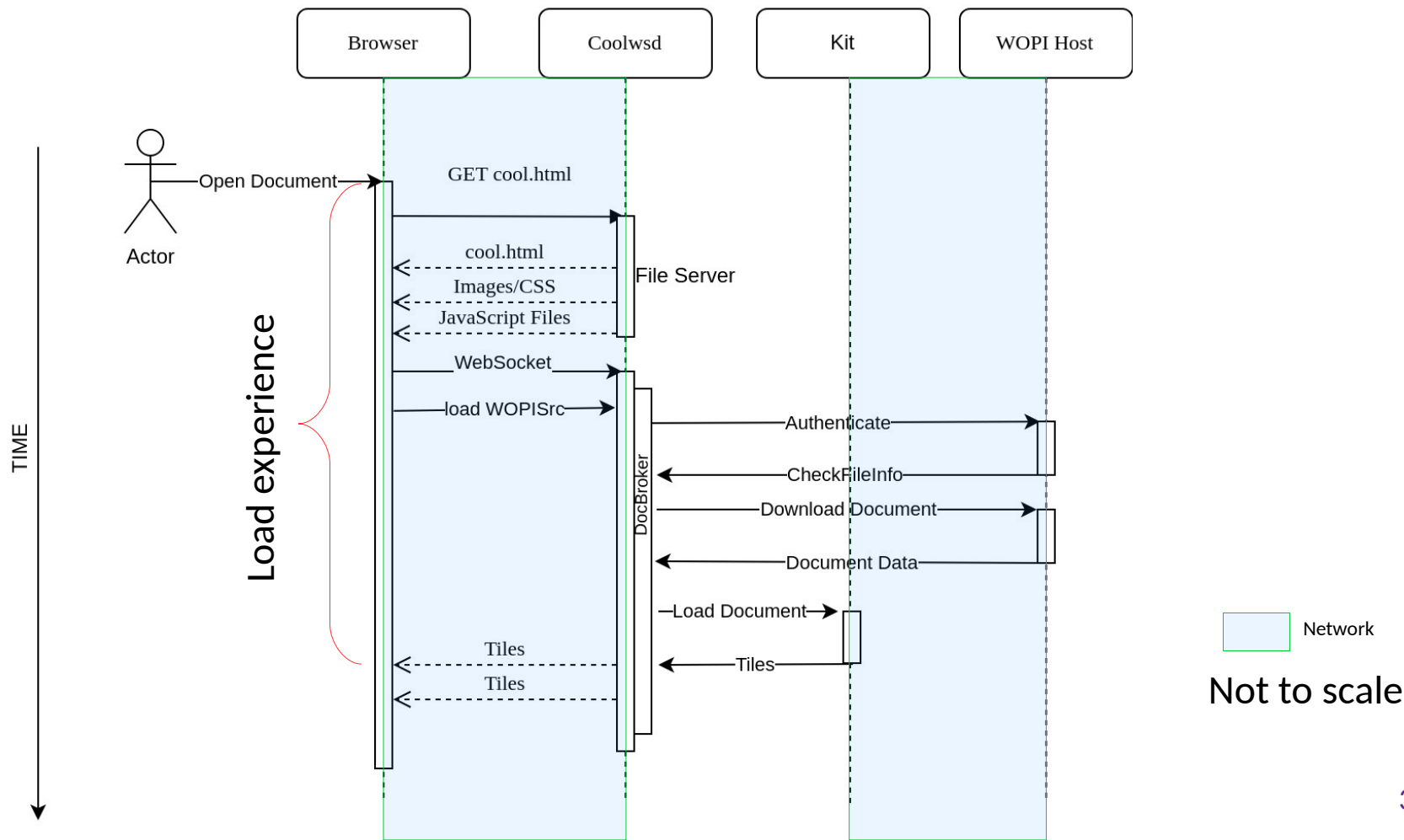
Opening Documents

Sequential steps

- User clicks on a document to open
- Browser requests cool.html (and related files)
- Coolwsd serves cool.html, javascript, others
- Browser creates WebSocket connection to coolwsd, sends load command
- Coolwsd creates DocumentBroker
- DocumentBroker authenticates the user through the WOPI host
- DocumentBroker downloads document file
- DocumentBroker loads the document
- DocumentBroker sends tiles to browser
- User can see document content



Opening Documents





Undesired Limitation

Subtitle content

- Slow networks
- Large distances
- Slow user device / browser
- Slow WOPI storage



Opening Documents: Async

User side

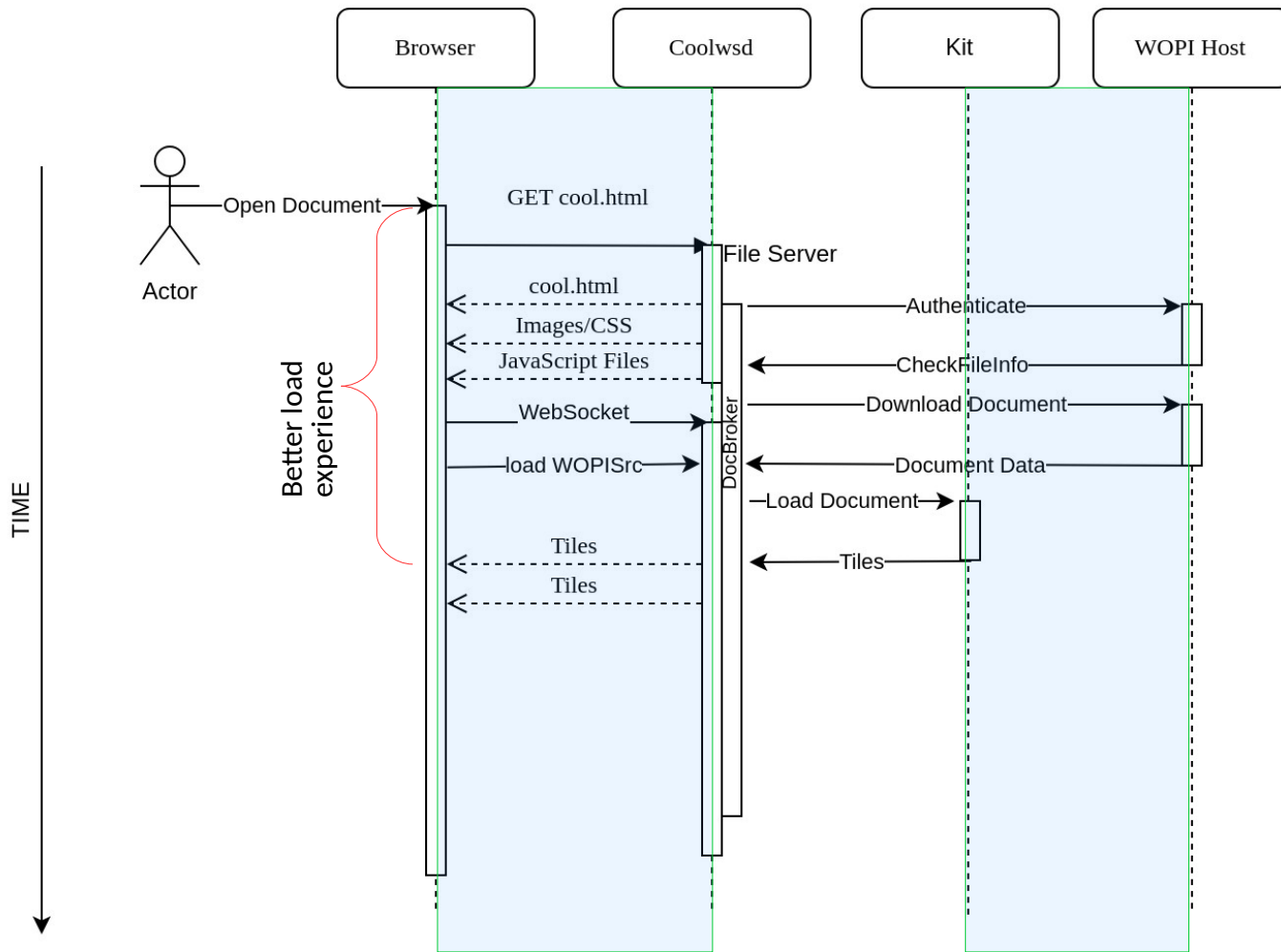
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-
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Parallel in coolwsd

- Coolwsd serves cool.html, javascript, others
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Opening Documents: Async



Not to scale



Conclusion

Final thoughts


- Up to ~50% reduction in latency
- Your mileage might vary
- More complexity
- More code
- Diminishing returns beyond a certain point



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Footer)



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Thank you!

By Ash



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