



Ente Ospedaliero Cantonale

Testing coverage: is it enough?

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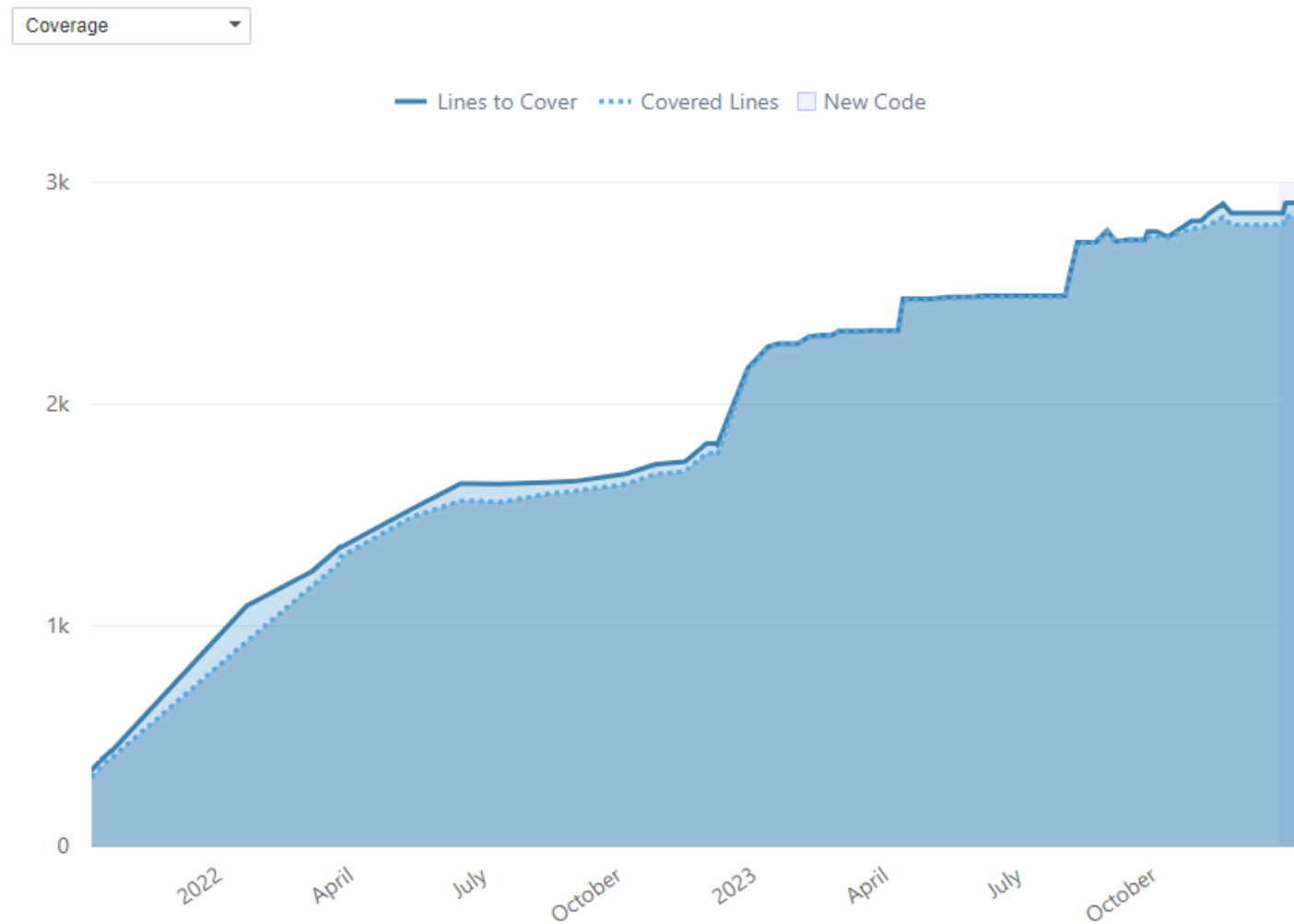
eoc

The never ending debate: quantity over quality

For supper

- Quantity → 100% coverage?
- Quality → a matter of perspective
- Educated repositories comparison
- Follow-up

100% coverage?



A matter of perspective

Pit Test Coverage Report

Project Summary

Number of Classes	Line Coverage	Mutation Coverage	Test Strength
51	100% 825/825	78% 151/193	78% 151/193

Breakdown by Package

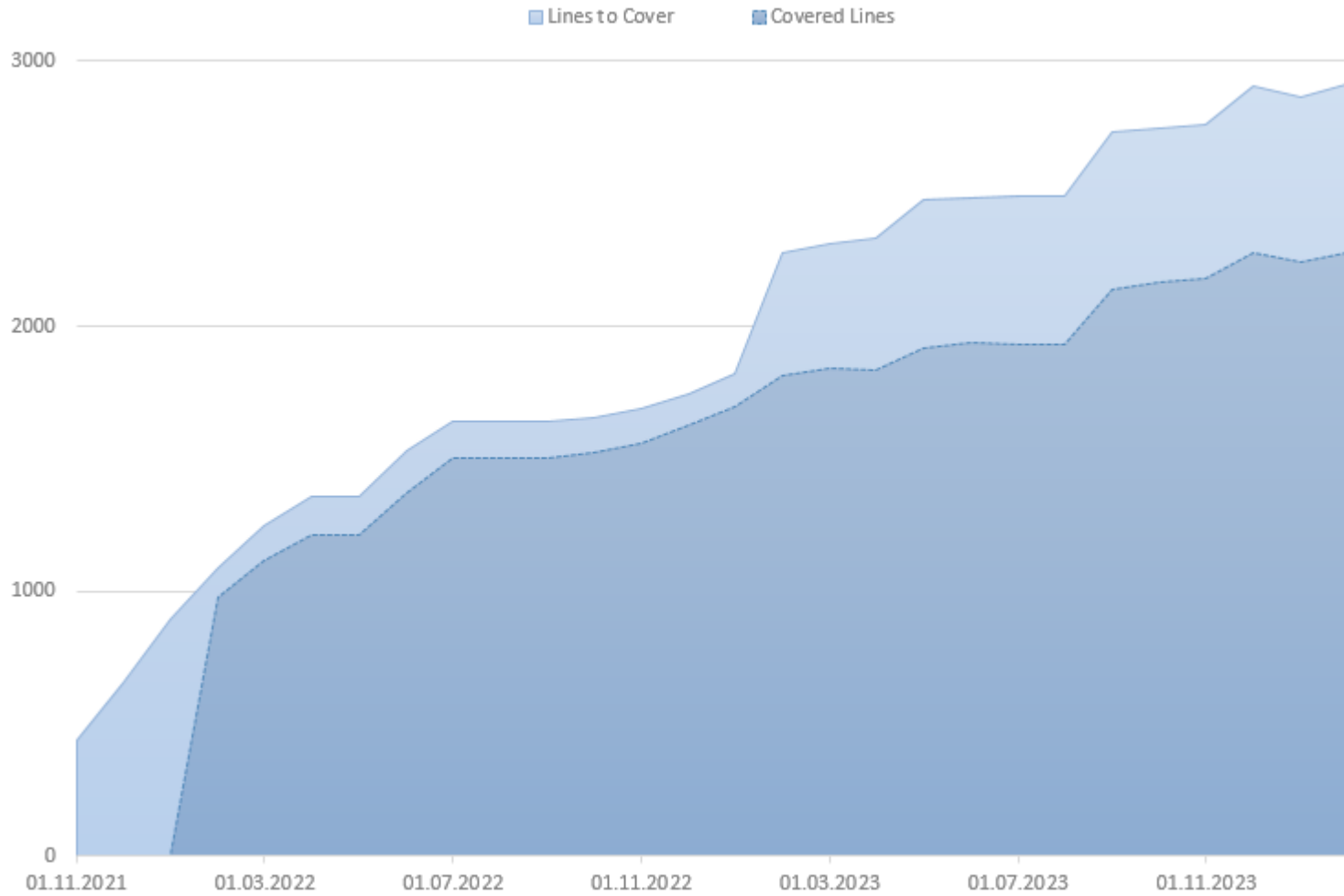
Name	Number of Classes	Line Coverage	Mutation Coverage	Test Strength
ch.eoc.jenkins.dsl	14	100% 333/333	51% 40/78	51% 40/78
ch.eoc.jenkins.pipeline	2	100% 29/29	100% 7/7	100% 7/7
ch.eoc.jenkins.snippet	33	100% 434/434	99% 101/102	99% 101/102
ch.eoc.jenkins.vars	2	100% 29/29	50% 3/6	50% 3/6

A matter of perspective

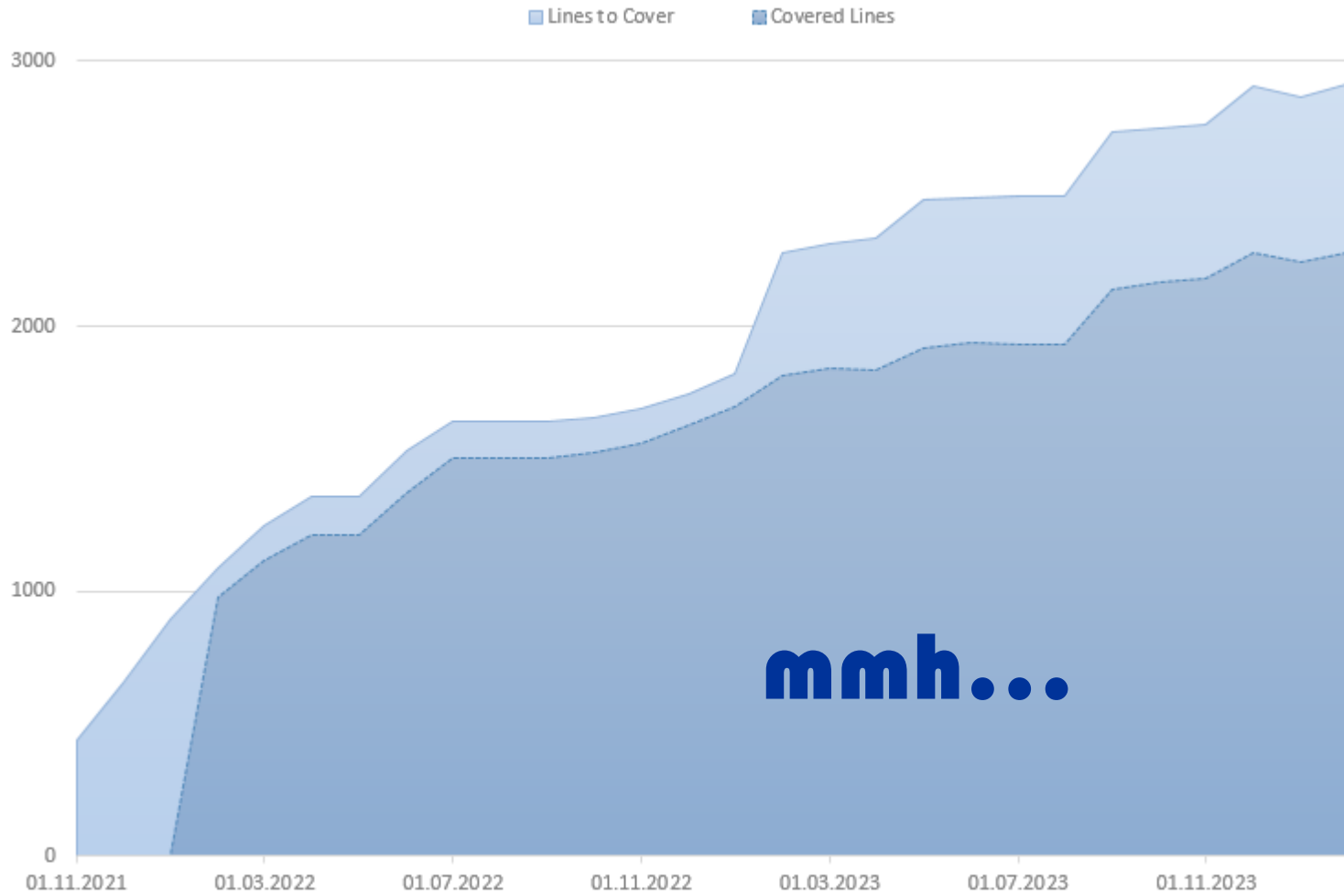
Gathering historical data:

- Executing pit monthly since november 2021
- Overlaying coverage with pit metrics

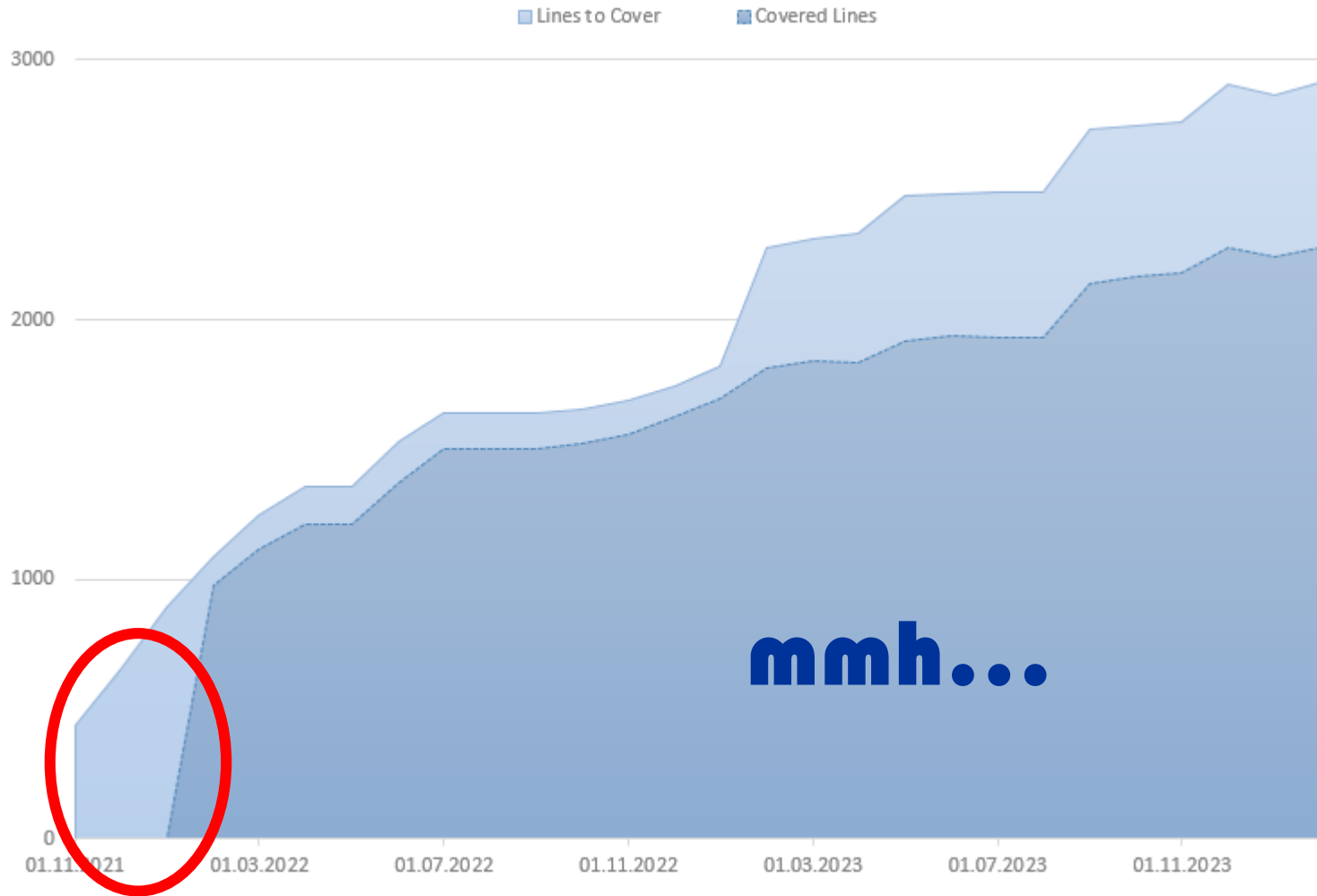
A matter of perspective



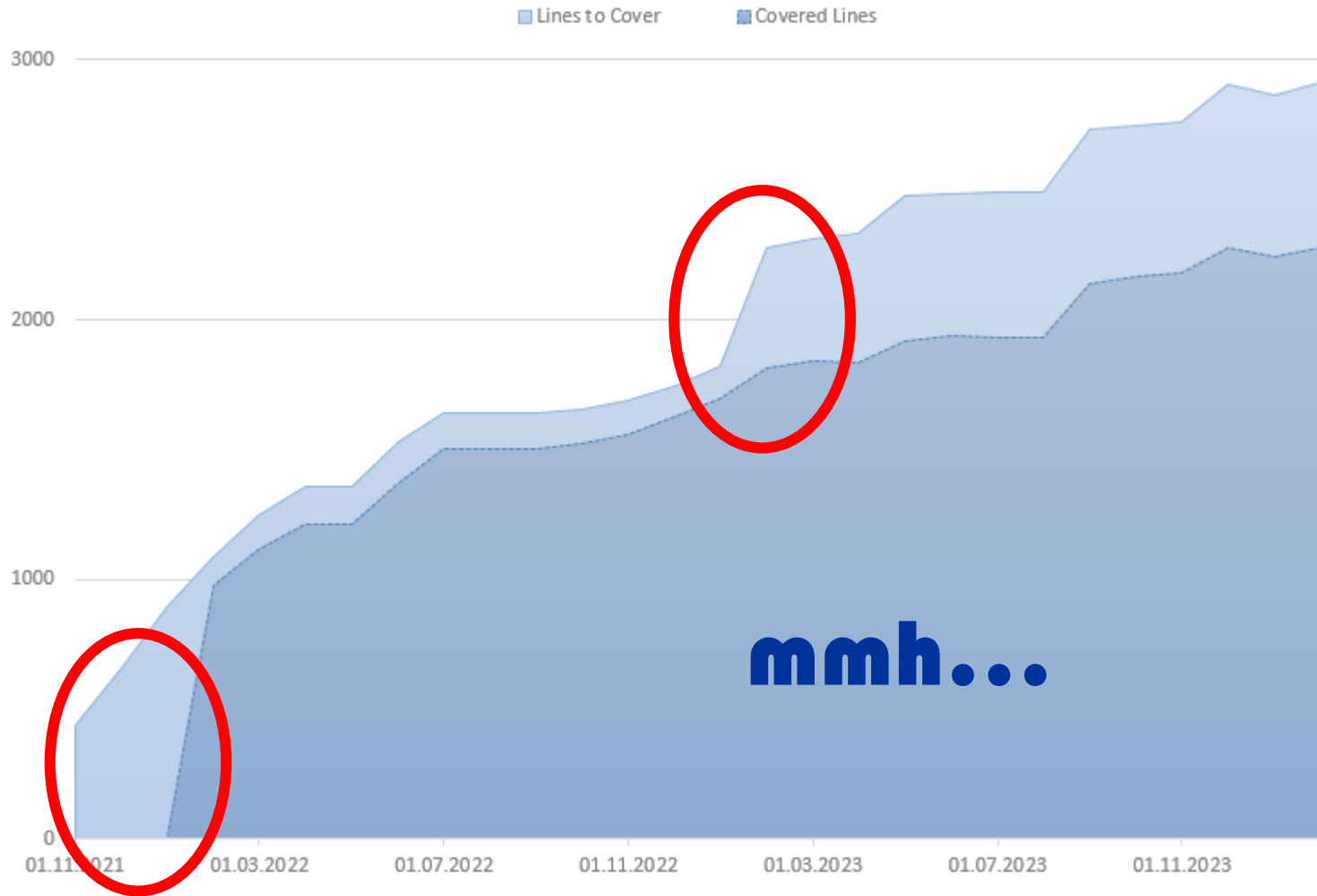
A matter of perspective



A matter of perspective



A matter of perspective



A matter of perspective

New questions arise:

- Why the sudden drop of coverage
- What is a good coverage %
- How we do compare to other stacks...

A matter of perspective

- How we do compare to other stacks... What!?



Repositories comparison – java backend

Name	Lines to cover	Line coverage	Mutation	Real coverage
eocnet2	1k	88%	60%	53%
eonos02	1.3k	88%	73%	64%
jenkins	2,9k	100%	78%	78%
cartella3	3,1k	80%	61%	49%
prescochemio	6,1k	78%	58%	45%
adt2	12k	31%	8%	2%
adts	33k	52%	39%	20%
prescomed	73k	56%	52%	29%

Follow-up

Unanswered questions:

- Test strength meaning
- Node.js
- Baseline metric for the teams

And of course I'll be filling jenkins tests coverage gap up to 100%!

Q&A

Thank you for listening
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